# OPERATION INHERENT RESOLVE

EDITED BY

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# Operation Inherent Resolve

## Insights and Perspectives from Air University

Edited by Jordan R. Hayworth

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# Introduction

*Jordan R. Hayworth*

During a 6 October 2014 CNN broadcast, Brooke Baldwin interviewed Col John Warden, USAF, retired to discuss the Islamic Sate of Iraq and Syria's (ISIS) capture of the city of Kobani, Syria. With Baghdad coming under the attack of ISIS shelling, the US began to send Apache helicopters into the area. Asked for his opinion, Warden commented that "helicopters are certainly useful, but they don't have the same capability as fixed-wing airplanes nor to the best of my knowledge do they have the numbers that would really be required to be effective in this particular kind of an operation." Baldwin followed this up by asking if he thought his "five-pronged air operation strategy from Operation Desert Storm" could work against ISIS. Warden responded in the affirmative, criticizing the administration of President Barack Obama for the "very measured, very slow kind of way" operations were conducted. When Baldwin asked Warden for his recommendation, he suggested that "a good idea is to put enough airplanes, from both the sea and the ground, over the skies of Syria and Iraq, that you simply induce an operational and strategic paralysis on the part of the Islamic State guys. I would guess that right now the majority of these guys have not seen an American fighter or bomber attack of any kind because the attack intensity has been so extraordinarily low. This is not the way to fight an air war."[1]

Warden's comment reflects the radically different ideas regarding the role airpower might have played in countering ISIS's threat to Baghdad and Kobani in the summer of 2014 and to the region more generally. Critics who believe that the United States is over reliant on airpower to achieve its national security objectives probably object to his portrayal of Operation Desert Storm as an overwhelmingly effective application of strategic airpower, producing effects through hundreds of sorties on the first day that, in Warden's words, "the Iraqis simply couldn't withstand." Those same critics will most likely be even more disturbed by his confidence that a similar approach could "simply induce an operational and strategic paralysis" against ISIS. Others may find his comments on President Barack Obama's view of the war misdirected.[2] On the other hand, many readers will likely agree with Warden's views, as many viewers surely did in June 2014

with public frustration rising over the undeniably "measured, very slow kind of way" in which the Obama administration's war plan developed to counter the ISIS offensive. In particular, many airpower strategists will likely agree—at least in general terms—with Warden's view that Obama's approach would not only be "dangerous" and "expensive" but would also prove to have the "lowest probability of winning." Many airpower advocates have agreed with Warden that a much more aggressive air campaign would have been an appropriate and effective response to ISIS in 2014.[3]

This book does not seek to provide a comprehensive history of the counter-ISIS air war. Nor will it definitively resolve the fundamental debates about airpower as epitomized by Warden's comments and the diverse responses they will likely elicit from this book's readers. Instead, we have worked to present essays from Air University faculty, students, and its intellectual community concerning important issues and perspectives raised both by the broader political and diplomatic context and the military application of American airpower in Operation Inherent Resolve (OIR). The timing of this publication proves fortuitous because it follows the arrival of the first substantial, comprehensive examinations of OIR, many of which focus on the role of airpower at the tactical, operational, and strategic levels of war. These works will prove to be the "first draft" of history that scholars and historians will continue to refine and critique through future research. It is hoped that this anthology will complement the works that already exist on airpower in OIR, provide greater detail on several issues that the comprehensive histories lack the space to consider in much depth, and spur further debate and inquiry about the diplomatic, political, and military issues raised by this important moment in the history of airpower and America's wars in the Middle East. The essays collected in this volume provide new perspectives on numerous military and nonmilitary aspects of OIR that will prove relevant for Air University faculty and students, military service members at all levels, policymakers, and interested civilian readers in America and abroad.

The rise of ISIS and its stunning offensives across Syria and Iraq led to a proliferation of books on the origins, ideology, and aspirations of the group. Probably the most successful of these works was Joby Warrick's Pulitzer Prize-winning book, *Black Flags: The Rise of ISIS*. Based on the author's ground-breaking reporting for the *Washington Post* and interviews with American and Middle Eastern officials,

the book provided the first substantive narrative of ISIS's origins under the Jordanian militant Abu Musab al-Zarqawi and its subsequent growth under leaders who succeeded him after his death in 2006. Most important, Warrick reveals that intelligence failures in the George W. Bush and Obama administrations misjudged the importance of ISIS's growing conflict with al-Qaeda, which laid the groundwork for the development of an Islamic caliphate. Amid the complicated conflicts raging in Syria, and the Shia-Sunni rivalry that grew more intense after the American withdrawal from Iraq, a series of missteps by Western officials failed to stop the rise of Zarqawi's movement. A combination of local conditions and Western mistakes facilitated ISIS's dramatic conquests in 2014. Warrick argues that ISIS's ranks were filled by "young men whose motivation derives less from theology than from a desire to fight authoritarian Arab regimes." He quotes Lebanese journalist, Rami Khouri as stating, "the combination of American jets and Arab jails was the critical fulcrum around which al-Qaeda and ISIS could germinate."[4]

In a similar yet distinct manner, Fawaz A. Gerges produced *ISIS: A History* to consider the group's emergence in the context of failed American interventions as well as local conditions. Gerges placed relatively less importance on Western actors than the corrupt political regimes, social inequalities, and sectarian religious conflicts in the Middle East. Most important, Gerges stressed the role of ideology. He argued that "an important Sunni constituency believes in the group's utopian and romantic vision of building an Islamic state, even though many might not condone its gruesome violence." The ideology that spawned ISIS did not emerge in a vacuum but was an outgrowth of Salafi jihadism. In addition, Gerges stressed the unintended consequences of Western military interventions and points to broader political and economic reforms as the solution to the systemic factors that allow groups like ISIS to spawn. He noted that, by late 2015, "the effectiveness of the US and Russian coalitions has been limited due to the fierce rivalry between the global and regional powers." In the face of American and coalition airpower, Gerges warned that "ISIS has shown tenacity and adaptability." Referring to the campaign up to late 2015, Gerges signaled his concern about ISIS's durability against Western firepower: "While weakened by American airstrikes and repeated ground assaults in Syria and Iraq, the group remains a potent force, able to resist deadly offensives in both countries and to fight to the last man."[5]

William McCants's *The ISIS Apocalypse* provided an early explanation of ISIS's ideological and religious aspirations based on his deep reading of their theological and propagandistic writings. McCants argued that ISIS's "extreme brutality defies the conventional jihadist playbook," even compared to groups like al-Qaeda. While Osama Bin Laden's group generally sought to limit violence in the Arab world, ISIS "set about laying the ground work for taking over the world, beginning in Muslim-majority countries." McCants viewed Western interventions as partially responsible for facilitating ISIS's rise: "The US invasion of Iraq and the stupendous violence that followed dramatically increased the Sunni public's appetite for apocalyptic explanations of a world turned upside down." Yet the failure of the West to take greater action in the face of ISIS's rise also contributed: "From 2012 to 2014, the wait-and-see approach of the international community emboldened the Islamic State and filled its ranks, making it a real threat to vital U.S. interests in the Middle East." McCants worried, in 2015, that ISIS was "too entrenched now for quick solutions. . . . Attacking from the air will degrade the Islamic State but will not destroy it. Its soldiers are in urban areas where they are hard to target without killing thousands of civilians." McCants also believed that "sending in a large contingent of American troops would enflame public opinion at home and abroad." Without great optimism, he advised that "the coalition should continue using airpower to diminish the state's ability to raise money and wage war" but concluded that "the disappearance of a jihadist statelet doesn't mean the disappearance of the jihadist. They will continue to wage insurgencies, taking advantage of the political instability and social unrest that gave rise to their statelets in the first place."[6]

Soon thereafter, the US-led international campaign against the ISIS threat drew the attention of several analysts. David Kilcullen, for example, offered his thoughts in several books and articles. In *Blood Year*, he offered a systematic critique of American foreign policy and military strategy to explain the stunning initial successes of ISIS. Most interestingly, Kilcullen proposed a strategy to treat ISIS "as primarily a state-like entity, or a state-building enterprise." In his view, ISIS should have been seen as "a conventional adversary—not a counterinsurgency or counterterrorism problem per se—and one with which we need to deal quickly and decisively before it does even more damage." He offered that "a conventional-style conflict against ISIS need not involve large Western combat units, or an open-ended

commitment to occupation and reconstruction." Rather, Killcullen favored "a radically increased weight of airpower to back . . . only a moderately larger number of ground troops" while limiting the war's objectives "to removing those characteristics that make ISIS a state-like entity."[7] Kilcullen's views appear to have informed subsequent developments in America's strategic approach in OIR.

One of the most important think-tank pieces to emerge was a RAND report published by a team of authors, including Seth G. Jones. Published in 2017, Jones and his team offered tentative conclusions about the political, diplomatic, and military aspects of Operation Inherent Resolve. Jones's report called for "a global strategy to roll the group and its movement back." The strategy needed to be global because, as the report noted, ISIS had by 2016 moved to control territory not just in Syria and Iraq but also in nations such as "Libya, Nigeria, Egypt, and Afghanistan." They found that OIR had already greatly reduced ISIS's claims to statehood by early 2017 while "polling data" showed "declining support across the Muslim world for the Islamic State and its ideology." Nonetheless, the study warned that "it remains possible that the Islamic State . . . will continue to metastasize and spread its influence even once it loses its home base." While OIR's combination of coalition and Russian airpower, Western special operations forces (SOF), and indigenous ground forces might physically destroy the Islamic State, "The group is likely to persist for some time in Iraq and Syria with other nodes across the globe, even after it loses most of its territory and its claim to an actual caliphate." Thus, even a ramped-up bombing effort could not overcome the need for a sustained American commitment to roll back ISIS influence and power across the world.[8]

An early account from the campaign's participants appeared in 2019. In *Hunting the Caliphate*, Major General Dana Pittard and Master Sergeant Wes Bryant provided an insider's perspective on the war and the development of the strike cell. The combination of Pittard's perspective as Joint Forces Land Component Commander-Iraq and Bryant's as a joint terminal attack controller provided a unique angle from which to approach the campaign, which, they claimed, "wrote a new chapter in US military operational history."[9] Indeed, in the book's forward, General David Petraeus commented that "a new way of waging war evolved, largely unprecedented in its methodology and application of modern technology." Specifically, Petraeus notes that, "The employment of an enormous constellation of manned and

unmanned intelligence, surveillance, and reconnaissance (ISR) assets together with air and ground-launched precision strike munitions— all guided by the industrial-strength fusion of all forms of intelligence—in order to enable host nation forces with whom coalition advisors were located, has been a path-breaking approach."[10] In particular, Pittard and Bryant claimed that the formation of the strike cell at Baghdad International Airport (known as the BIAP Strike Cell) "laid the foundations for how America would continue to wage its war against the caliphate. Over the months and years to follow, the BIAP Strike Cell and others like it would come to decimate ISIS ranks on a massive scale throughout Iraq and Syria."[11] Yet, throughout the book, Pittard and Bryant referenced numerous examples of political controls that frustrated military operators and, in their view, limited the campaign's effectiveness. They concluded that "policy makers and government officials must better understand the warfighter's point of view."[12] While taking evident pride in the military effort to destroy ISIS's caliphate, the authors raised important questions about the campaign's overall contribution to regional security and American objectives: "We would be remiss to ignore the unintended consequences that come from the sheer scale of our airstrike campaigns." They pointed out that the civilian impact "can never truly [be] effectively quantified" and that "many of the areas we've liberated from ISIS have been decimated."[13]

Most recently, we now have available two solid, comprehensive accounts of airpower's role in the campaign, starting with Benjamin Lambeth's *Airpower in the War Against ISIS*. Anticipated by an earlier book chapter on the subject of OIR and a number of books on modern American airpower operations, Lambeth's work has drawn attention for its in-depth coverage of OIR's airpower dimension as well as criticisms of the Obama administration's approach to the campaign, which he describes as "half-hearted" and marked by a "persistent absence of any apparent seriousness of purpose."[14] Lambeth criticizes Obama administration officials and US Central Command (CENTCOM) planners for failing to closely examine ISIS "as a freshly arisen regional challenge and then conducting at least the beginnings of a fact-based inventory of its targetable vulnerabilities in both Iraq and Syria before dropping the first bomb." Consequently, the US "misdiagnosed ISIS as simply a resurrected Iraqi insurgency rather than as the ambitiously aggressive would-be state in the making that it actually was." Lambeth believes that a correct assessment of ISIS in 2014

should have led to a fundamentally different military strategy aimed at "simultaneously attacking the heart of the enemy's center of gravity in Syria from the campaign's first moments onward."[15] According to Lambeth, President Donald J. Trump adopted a more concerted approach and pushed the Pentagon and CENTCOM to "develop and submit a concrete plan for intensifying the nation's effort against ISIS."[16] Although Lambeth warns that OIR started with an early "misuse" of airpower, he concludes that it ultimately proved "another American and coalition success story made possible largely by US-led airpower, which was unquestionably the deciding factor in providing an essential asymmetric edge to those ISF, SDF, and Kurdish troops who conducted the brunt of the hard fighting."[17]

Shortly after the publication of Lambeth's book, RAND released an overall summary of airpower in OIR. Based on extensive research and interviews with participants, the RAND authors have provided the most detailed strategic and operational study of airpower's role in OIR available to date. They note that "the U.S.-led air war against ISIS was unique and complicated and different from more-recent U.S. engagements" and that the campaign revived "old debates about how airpower should be employed."[18] Compared to Lambeth, the RAND report takes a more moderate tone, though it does not avoid criticisms of the Obama administration. The RAND team concludes that the initial strategy "reflected the U.S. and coalition preference for a light-footprint approach."[19] Moreover, they argue that the "limited liability, limited risk" strategy that US officials and planners developed in 2014 "fundamentally shaped how airpower was employed against ISIS and did not significantly change throughout the duration of the operation."[20] They doubt that "sustained strategic attacks against ISIS in the first months of the operation" would have worked "because of the intelligence problems that impeded the development of deliberate targets." Additionally, they consider ISIS a hybrid adversary that remained an "irregular opponent" even as it evolved into a protostate. Even after the air campaign intensified, the RAND study suggests that "the effects of strategic attack operations may be overstated."[21] Indeed, it concludes that deep strike operations that weakened ISIS's financial base nonetheless remained "peripheral to the overall strategy," which focused on destroying ISIS's territorial base. Pursuit of that objective prioritized "the close fight."[22] The RAND study strongly suggests that close air support (CAS) in support of regional partner forces and US SOF proved the primary effort. Rather than being misused

or ineffectively applied, the RAND team concluded that "airpower was indispensable to defeating ISIS."[23]

Thus, Operation Inherent Resolve has already received much attention from journalists, political scientists, military historians, and airpower scholars; it is sure to remain a subject of interest and productive debate as more information and evidence become available. This book complements the existing literature by offering insights and perspectives on a range of topics, many of which have received relatively light attention in the existing scholarly literature.

Our book begins with a chapter by Paul J. Hoffman on "The Islamic State on the Eve of OIR: From Insurgency to Protostate." As noted, the degree to which ISIS should be seen as an emerging state has drawn much debate in the existing literature. Military thinkers like Warden and Lambeth believe that political and military analysts misidentified ISIS as an urban guerrilla-like insurgency movement that would be potentially less susceptible to airpower given its supposed lack of conventional and industrial capacity. These thinkers argue that ISIS was actually an emerging state with critical vulnerabilities that favored a more direct application of airpower. Hoffman's chapter provides an overview of ISIS's emergence as a terrorist movement under al-Zarqawi to what he calls a nascent or "protostate" by 2014. According to Hoffman, ISIS "presents a novel case in the study of insurgencies" as it "was an insurgency that made the jump from rebellion to de facto political control of a coherent geographical region." He agrees with Lambeth that "the metamorphosis from insurgency to inchoate state . . . introduced potential vulnerabilities." Perhaps most important, as Hoffman shows by examining ISIS's control of Mosul, Ramadi, and Fallujah, it failed to establish uniform security and control throughout its aspirational caliphate. Despite ISIS's vulnerabilities, Hoffman concludes that the "Islamic State demonstrated remarkable organizational resilience, flexibility, and adaptability in pursuit of its overarching goal: the creation of a Sunni Caliphate centered in Iraq and Syria." Moreover, the complexity of ISIS as a quasi-insurgency/protostate posed a significant problem for OIR planners and raised substantial questions about the potential effectiveness of an air campaign. Even if airpower could destroy ISIS's state, it remains unclear that any form of military power could destroy the ideology that continues to fuel various ISIS-backed insurgencies across the region.

Another factor that has contributed to debate in the literature on OIR is the political considerations that supposedly limited the

effectiveness of America's initial efforts to combat ISIS. Like Lambeth, many commentators have criticized the Obama administration's restraint in the face of ISIS's growth and offensive in 2014. Similar to commonly held views of overcautious political leadership in Vietnam, many have argued that Obama imposed unnecessarily stringent rules of engagement that reduced the military response and tied the hands of military planners. To address these critiques, J. Wesley Hutto provides an assessment of the US political context in the period after America's withdrawal from Iraq and OIR's commencement. By 2014, he notes that the conflicts in Iraq and Afghanistan "had soured the political appetite for American military engagement on the ground in the Middle East and distracted from growing threats in Eastern Europe and East Asia." Drawing upon Carl von Clausewitz's view of war as a continuation of politics, Hutto suggests that the Obama administration correctly understood the public's declining enthusiasm for military interventions, especially involving boots on the ground. Perhaps more important from a strategic perspective, Obama saw a "revanchist Russia" and "rising China" as more significant long-term threats, whereas he infamously initially characterized ISIS as the "JV team." Hutto portrays Obama's strategy and OIR's mission as based on a "calculated measure" that made use of cutting-edge military technology with precision guided munitions and remotely piloted aircraft of ever-increasing sophistication. As Hutto's chapter reminds us, the US entered OIR with a war-weary public and a looming return of great power competition on the horizon. As several other chapters in this book discuss, OIR cannot be understood as a simple air war against ISIS but rather a highly complex conflict occurring amid an increasingly competitive international order. Military and political leaders must grapple with OIR's implications for airpower and the public's response to military interventions but also American national security interests against near-peer adversaries like Russia and regional threats like Iran.

Diplomatic efforts to isolate the Syrian regime for its human rights abuses, while generating partners to fight ISIS, constituted a major aspect of American foreign policy. Two chapters focus on the complex diplomatic issues raised by the US efforts in Syria. Mitchell Fossum argues that OIR should be seen as a "war within a war." An inflection point occurred in December 2015 when the UN Security Council passed UNSCR 2254, establishing a framework for a negotiated cease-fire in Syria. As Fossum explains, several strategic variables

continued to make the peaceful resolution of the Syrian Civil War especially difficult. These factors also impacted the effectiveness of the international military effort against ISIS. Similarly, Christopher Hemmer's chapter on the diplomatic backdrop to OIR points to the "inherent frictions" that characterized the American efforts to achieve its objectives against ISIS amid the on-going Syrian Civil War. Hemmer explores this issue through the lens of American diplomatic relationships with Turkey and Israel. He argues that the US cannot expect "frictionless" relations with allies and partners but must seek ways to manage friction and be prepared to make difficult choices that reflect fundamental priorities as much as idealism. Thus, neither airpower—nor military power in general—can be seen as the central theme in a coherent understanding of OIR, which brought the United States even further into a highly complicated diplomatic situation.

Not only was the war against ISIS not purely an airpower story, but it was also far from a simple, unilateral effort in which the United States pursued the defeat of ISIS and its own regional interests. As Jonathan K. Zartman explains, the war against ISIS saw Iran continue its traditional policy of increasing its regional power and influence through proxy forces. Working with Syrian and Iraqi government forces, Iran made effective use of local militia networks across the region that provided foot soldiers against ISIS and supported Tehran's strategic ambitions for regional predominance as well as its long-held ideological aspirations. Zartman provides readers with an overview of Iran's long-term support for Hezbollah and its reliance on this proxy force to provide critical training and assistance for Shia Arab militias in the fight against ISIS in Iraq and Syria. He also sheds light on the growth of the Badr Organization, an Iranian client in Iraq that worked closely with the US in military operations against ISIS. Iran continued its support of the Mahdi Army of Muqtada al-Sadr that the US confronted after its 2003 invasion of Iraq. After the US withdrawal from Iraq and the Syrian Civil War in 2011, Iran leveraged these and other client militias to increase support for Syria's Basher al-Assad and its influence in Iraq. Iran also mobilized thousands of Afghan Shias to fight as part of the Fatemiyoun Brigade, a poorly trained organization with a complex group of fighters who engaged in some of the most serious combat in Syria. Iran played a key role in assisting Syria's organization of disparate militias into a National Defense Force, an organization that grew out of the Syrian Civil War but proved immediately important in the fight against ISIS. Finally, Zartman

draws our attention to the distinct strategies that Iran pursued against ISIS in Syria and Iraq, owing to the situational differences in both countries and Iran's particular interests and goals. He notes the important role played by Iranian General Qassem Suleimani in negotiating Russia's entry into the war and coordinating Russian air strikes with the attacks of Iranian client militias. As Zartman observes, in both Iraq and Syria, the intervention of Iran proved critical to defeat ISIS, but the strengthening of Iran's regional power as a result constitutes one of the many costs of the war from an American perspective.

In addition to increasing Iran's presence in Syria and Iraq, the campaign against ISIS and the complex geopolitics of the Syrian Civil War led to Russia's military intervention. Suddenly a civil war and antiterrorist effort became an even more significant aspect of global strategic competition. Andrew Akin provides an overview and assessment of Russia's intervention that explores the motivations of Vladimir Putin's foreign policy and military interventions, a chapter made even more relevant in light of Russia's recent invasion of Ukraine. The rise of ISIS afforded Russia the opportunity to depict its activity as a fight against terrorism. Yet Akin maintains that Russian interests led to the intervention, including longstanding aspirations along its southern borders. In 2015, a Russian national security strategy document referred to US interventions in the Middle East as destabilizing and threatening to its interests and allies, including its Syrian client state. These concerns, Akin argues, led directly to Russia's intervention in September 2015. Russian activity complicated the US intervention and increased the risk and friction of air operations. They proved critical to shoring up Assad's regime while making significant, if not decisive, contributions against ISIS. Russian strategy and military operations benefited from improved technological capabilities and tactics that saw improvements in its operations against ISIS and Syrian rebel groups. Akin highlights the uncertainty and friction stemming from Russia's intervention. This demonstration of Russian power projection increased its stature in the region and on the world stage. Like other issues examined in this book, Russia's intervention proved a complicating factor in OIR.

The role of the Kurds constituted another challenge that arose during the US intervention against ISIS. David Sorenson puts the Kurdish contribution in both a long-term context and an immediate perspective, examining the impact of the Syrian Civil War and emergence of ISIS on the Kurdish population in the region. With the aim of creat-

ing a coalition of countries and groups to counter ISIS, the US continued cultivation of close relationships with various Kurdish groups, especially the YPG International (*YPG Enternasyonel,* YPG), despite tensions that flared with other allies and partners in result. Sorenson begins his chapter with an overview of the Kurdish populations in Syria, Iraq, and Turkey and offers an analysis of their various political organizations and relationships. He pays close attention to the rise of the Kurdish *peshmerga*, which fielded almost 200,000 troops and became a vital component of the effort to combat ISIS on land. Although ISIS's offensive into Iraq did not mainly target the Kurdish areas, it was Kurdish forces who rose to the challenge, hoping that the US would favor the larger objectives of Kurdish nationalism in return. The desire to minimize US ground forces raised the importance of indigenous forces yet also complicated America's coalition efforts. Kurdish participation proved a major friction point in the coalition as it antagonized Syria, Turkey, Iraq, and Iran. Sorenson shows how American initiatives integrated Kurdish forces into operations with Iraqi security forces. However, this combination did not prevent Turkey from exploiting opportunities to operate against Kurdish positions, including with strikes into Kurdish regions of Iraq. After examining the role of the Kurds in OIR, and the changing American policy from the Obama to Trump administrations, Sorenson assesses the Kurdish position after the American withdrawal from Syria. He warns that the US abandonment of the Kurds after the conclusion of major operations against ISIS will likely impede its ability to develop future partnerships with state and nonstate actors. The Kurds played a vital role in OIR, yet their international position grew even more precarious.

The remaining chapters shift in focus from the diplomatic, geopolitical, and regional circumstances to consider various aspects of the military—and most especially airpower—role in OIR. Lina Svedin takes a broad look at the legal and ethical dimension of US airpower in the Syrian campaign, including the use of airpower against ISIS. She argues that ethical implications are "intellectually ambiguous yet essential aspects of military engagements," especially in conflicts such as OIR that saw overlapping complexities stemming from irregular warfare, humanitarian concerns, increasing demands of "international lawfare," and the risks of escalating great power competition between the states engaged in operations. Svedin begins her chapter by establishing a framework for legal and ethical considerations in modern war, which stimulates thinking beyond the specific context

of OIR. She then examines legal considerations that restrained US airpower in OIR and could conceivably arise in future conflicts. She discusses ethics in relation to American bombing efforts and concerns over collateral damage as well as with respect to reliance on bad actors and the US abandonment of the Kurds. Although humanitarian concerns spawned the US intervention as much as realist considerations of US interests, the campaign undoubtedly proved legally challenging and ethically ambiguous at times, especially as efforts intensified in an increasingly uncertain and complex environment. As Svedin concludes, "the Syrian conflict challenged the appropriateness of international law and multiple US core values."

Of course, the violence unleashed by ISIS captured most attention, including the capture and burning alive of Jordanian pilot Moaz al-Kasabeh in late 2014. Paul Sheehey and Jared Donnelly discuss how this event led to urgent preparations for combat search and rescue missions as American leaders feared such a fate for one of the hundreds of American pilots flying sorties in OIR. They provide a more detailed assessment of lessons learned than previous works have been able to supply. The early efforts struggled because of a "lack of highly trained and adequately postured rescue forces." Yet the United States Air Force (USAF) rapidly deployed combat search and rescue (CSAR) forces "with full operational capability in February 2015." Sheehey and Donnelly observe that CSAR provided a "direct political strategic link" to "both US and coalition governments." They warn that CSAR capabilities ossified over time in uncontested environments, but that changing circumstances seen in OIR point to a future in which the security of our aircraft cannot be taken for granted. Accordingly, CSAR will be of heightened strategic relevance in hybrid and contested environments. They will "require judgment and decision-making at the lowest tactical levels to achieve success in time-constrained situations, knowing that perfect battlefield awareness is unlikely." The authors argue for a change in the structuring of CSAR forces for greater flexibility and operational responsiveness. The lessons learned from CSAR in OIR will be applicable to future irregular wars but also offer suggestions for future high-end fights in contested environments.

Similarly, Heather Venable's chapter on the Marine Corps' air-ground team in OIR sheds light on lessons learned that could apply across the spectrum of conflict as the Marine Corps assesses future roles and missions. In particular, Venable considers the potential for future operational development of the Special-Purpose Marine Air-

Ground Task Force-Crisis Response-Central Command (SPMAGTF-CR-CC). Although originally envisioned as a tool for embassy protection in the aftermath of the Benghazi attack, the SPMAGTF-CR-CC became a crucial air support mechanism that maintained a flexible, light-footprint approach. By examining the unit's performance in OIR, Venable raises important questions about its viability in other scenarios and its relative effectiveness compared to the traditional Marine Expeditionary Unit (MEU) or the Army's 82nd Airborne Division. In OIR, the Marine air-ground team made use of hardware like artillery, F-35s, and MV-22s, which "enable the SPMAGTF-CR-CC to function as a kind of land-based MEU, remaining on land over the deployment cycle but located in multiple countries at any given time." Budget tightening brought on by sequestration led the Corps to seek an opportunity to show off its readiness and capability. Yet the present focus has shifted to developing long-range fires, a transition that seems somewhat at odds with the direction of the United States Marine Corps in OIR. Thus, Venable's essay offers an in-depth account of the Marines in OIR as well as an examination of the impact of OIR on the Corps' organizational makeup and future development.

The final chapters in this volume are derived from an Air University Airpower Vistas Research Task Force led by Lt Gen Allen G. Peck, USAF, retired and Col John P. Geis, USAF, retired. They collectively offer insights into technical and operational dynamics facing airpower during and after OIR. Bret Harms' paper suggests that the USAF missed opportunities to implement data fusion and software solutions to improve targeting in OIR. He sees both as critical for the future success of Joint All-Domain Command and Control (JADC2) yet finds that a troubling gap existed in "software solution awareness." Gary Beckett's paper examines the deliberate targeting process in OIR and identifies a concerning lag time that proved problematic in the campaign and that would be "amplified in high-end conflict." He highlights three critical problems for further focus: intelligence capacity, ISR asset availability, and eliminating redundancies in the target-vetting process. Beckett proposes artificial intelligence and automatic target recognition research as viable solutions to many of these problems. He believes that "these improvements could enhance JADC2 and ensure decision advantage in future conflict." Robert Vincent complements the two preceding essays by examining tanker planning for mission-critical aerial refueling operations as an example

of "a class of informational problems where the Combined Air Operations Center (CAOC) overcame numerous institutional barriers to innovate problem solving." System limitations delayed the tanker planning process in several instances, which Vincent documents carefully. He uses root cause analysis to identify recommendations for future CAOC operations. Finally, Michael Landers engages with broader debates about airpower's use in OIR through the case study of the liberation of Mosul. While providing a detailed analysis of the operation, Landers argues that lack of coherent strategy impacted the campaign. He agrees with Lambeth that ISIS's structure as a proto-state rather than a classic insurgency made it vulnerable to airpower. His conclusions support many of Warden's critiques that started this introduction and should contribute to the wider debate about airpower's employment in OIR.

Each of these essays presents new insights on the topics they cover. Together, they constitute a valuable contribution to the growing literature on OIR that will inform military professionals, policymakers, scholars, and the public.

### Notes

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9. Dana Pittard and Wes Bryant, *Hunting the Caliphate: America's War on ISIS and the Dawn of the Strike Cell* (New York: Post Hill Books, 2019), xiv.

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12. Pittard and Bryant, xvi.

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15. Lambeth, xiv.

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Chapter 1

# The Islamic State on the Eve of OIR
## From Insurgency to Proto-State

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The organization known as ʻ*al-dawla al-islaamiyya fil-il-iʼraq wa ash-sham* had established itself as the dominant Sunni jihadist organization in Iraq over the course of a decade by the time "ISIS" entered the public consciousness in 2012–2013.[1] From its roots as a small terrorist group led by Abu Musab al-Zarqawi to the nascent state proclaimed by Abu Bakr al-Baghdadi from Mosul's al-Nuri Mosque in June 2014, the Islamic State demonstrated remarkable organizational resilience, flexibility, and adaptability in pursuit of its overarching goal: the creation of a Sunni caliphate centered in Iraq and Syria.

The Islamic State had grown beyond its roots as a small terrorist organization when the United States began attacks against it in June 2014. It had also grown beyond a localized insurgency that sought to pry territory away from both Iraq and Syria. It was a cause, a social movement, a rallying cry, and a mindset that appealed to individuals around the world attracted to its message of extreme violence in defense of a specific and violent interpretation of Islam. It manifested as a multinational jihadist proto-state that commanded thousands of members and sought complete social control over millions of people living in eastern Syria and northern Iraq. The group supplanted its former patrons in Al Qaeda as the preeminent jihadist organization in the world, and the rift between the groups fractured the jihadist community in ways that outlasted the Islamic State's caliphate project from 2014 to 2017.

The Islamic State presents a novel case in the study of insurgencies: it was an insurgency that made the jump from rebellion to de facto political control of a coherent geographical region. Its leaders developed bureaucratic structures at state, provincial, and local levels to govern its territory, and the Islamic State appeared to take its administrative and governance roles in earnest, albeit with policies reliant on violence and coercion directed at its citizens. The Islamic State acted enough like a state to mobilize public and private resources in the pursuit of its goals, which created opportunities for the Islamic

State in Syria, Iraq, and in regions where it sought to establish branches beholden to Abu Bakr al-Baghdadi. The metamorphosis from insurgency to inchoate state also introduced potential vulnerabilities.

Although there are many different frameworks and lenses useful in any review of the Islamic State, the combined chronological and territorial approach in this chapter focuses on distinct phases in the Islamic State's organizational history. Despite the name changes, leadership losses, and differing strategies over time, the group's core identity and goals remained consistent throughout its organizational lifespan: the Islamic State sought to establish an independent state based on their jihadist interpretation of the Sunni faith. The group capitalized on existing religious and ethnic grievances in Iraq to carve out this new state and took advantage of political opportunities created by a repressive Iraqi government, the Syrian Civil War, and the security vacuum created by the withdrawal of American forces in December 2011. In terms of operational design and campaign construction, territory was the Islamic State's center of gravity, yet as the discussion of the group's activities in Mosul, Ramadi, and Fallujah demonstrates, the Islamic State's degree of control throughout its holdings was far from uniform. Strategies to attack financial targets in Mosul would not be effective in Fallujah, where Islamic State activity was more akin to insurgent behavior than state administrative activity in Mosul or Raqqa. As a result, OIR planners faced an even more daunting challenge: developing a strategy and operational plans to defeat an organization that possessed the resources of a state, with the survivability and flexibility of an insurgency hardened by years of activity with significant operational sanctuaries.

## From Unity and Jihad to Al Qaeda in Iraq: The Zarqawi Era, 1999–June 2006

The Islamic State's history begins in 1999, when the Jordanian terrorist leader Abu Musab al-Zarqawi formed the group *Jama'at al-Tahwid wa al-Jihad* ("Unity and Jihad," or JTJ) to challenge the Jordanian government. Zarqawi was a reformed low-level thug who discovered Islam in the late 1980s and went to Afghanistan to fight in the jihad against the Soviets. He arrived after the puppet Soviet regime in Kabul collapsed. After working with mujahideen fighters in Pakistan, he returned to Jordan and began working with a small core to overthrow

the Jordanian regime in late 1993. The Jordanian security apparatus jailed Zarqawi and his spiritual leader, Abu Muhammad al-Maqdisi in Jordan's notorious al-Jafr prison in early 1994 after a failed attempt to attack an Israeli border outpost after the massacre of several Muslims in the West Bank town of Hebron.[2]

Zarqawi and Maqdisi spent five years in prison until they were released in a wave of pardons following King Hussein's death in 1999. With Maqdisi as his guide in jihadist theology, Zarqawi developed a reputation for strict religious piety and unquestioned leadership among the inmates.[3] After his release, he left Jordan for Afghanistan and attempted to join Osama bin Laden's Al Qaeda (AQ) organization. Rebuffed in this effort by skeptical AQ leadership, he established a training camp in Herat, Afghanistan, to train operatives and fighters for the struggle in Jordan. After 9/11, Zarqawi and his followers fled through Iran before settling in northern Iraq. Secretary of State Colin Powell cited Zarqawi's presence in Iraq as proof of the relationship between AQ and Saddam Hussein during the preparation for the US-led Iraq invasion in 2003.

JTJ pursued two goals as it began its attacks inside Iraq in August 2003, although the first would be subsumed by the second as violence mounted. First, the group adhered to Zarqawi's original goal of col-lapsing the Jordanian government. Second, Zarqawi sought to establish the caliphate, or Islamic nation, under shari'a law. However, Zarqawi's religious attitudes meant that this caliphate was meant for only those Muslims who followed his interpretation of Salafi teachings. As a religious restoration movement, Salafism seeks to return Islam to its "pure" form as found in the writings of the prophet Muhammad and in the lives of the Salif al-Salih, or "pious ancestors" who lived from 610–855 CE.[4] Salafists view Shia as apostates and rejectionists who live outside of Islam. Zarqawi's letters and statements display a hatred against the Shia that bordered on pathological, and his virulent anti-Shia mindset permeated his correspondence, and that of his successors.

As Zarqawi gained notoriety and followers inside Iraq, he attracted AQ's attention. AQ had been on the run since the end of 2001, and the organization needed to rebuild its image and profile as the van-guard of the jihadist movement. Aligning with AQ served Zarqawi's interests by further raising his profile and establishing him as the leader of the jihad in Iraq. Zarqawi pledged his allegiance, or *bay'ah,* to Osama bin Laden in October 2004, when JTJ was formally named "Al Qaeda in the Land of the Two Rivers," or "Al Qaeda in Iraq" (AQI).

This marriage of convenience was marked by quarrels and infighting from its beginning. Zarqawi was used to running his own operations and ruling his organization. Although receiving AQ's imprimatur enhanced Zarqawi's reputation, the formalized relationship added oversight that he found uncomfortable. Zarqawi claimed that the Shia constituted a direct threat against the Sunni people and must be destroyed.[5] Ayman al-Zawahiri countered that Zarqawi's continued violence against the Shia and neutral Sunni civilians in Iraq undermined efforts to build popular support both within Iraq and among foreign supporters. He also chastised Zarqawi for circulating the graphic beheading videos that earned him the title of "Sheikh of the Slaughterers."[6]

As AQI's profile grew, it attracted other groups operating as part of the insurgency inside Iraq. AQI merged with five smaller groups in January 2006 to form the *Majlis Shura al-Mujahideen* (Mujahideen Shura Council, or MSC), which worked to coordinate efforts among Sunni jihadist groups, with AQI taking its place as the first among equals. Zarqawi remained the central figure in MSC until he was killed in an airstrike in Baqubah in June 2006. His death did not signal AQI's end; instead, Zarqawi became a martyr to the cause. Abu Ayyub al-Masri took over AQI after Zarqawi's death, while the MSC proclaimed the creation of the Islamic State in Iraq (ISI) in October 2006. AQI and ISI merged in November 2006 under the leadership of Abu Omar al-Baghdadi.

Three key events with longstanding effects shaped the environment in Iraq for Zarqawi and his successors. In May 2003, the Coalition Provisional Authority (CPA) issued two orders that had disastrous effects on Iraqi civil society. CPA Order Number 1 eliminated the remnants of Saddam Hussein's Ba'ath Party as a political organization. It also excluded middle- and high-ranking Ba'ath Party members from civil office and government posts. Since party membership was required for mid-level jobs in Saddam's Iraq, this order robbed Iraq of talented citizens in the transition process. CPA Order Number 2 dissolved the Iraqi military along with several internal security ministries and posts. The discharged soldiers would presumably join Iraq's new defense force, but transfers and enlistments were not carried out automatically. Although the military was split between Shia and Sunni troops, the move affected mostly Sunni members, who were also prevented from seeking jobs because of CPA Order Number 1.

Second, the fall of the Saddam Hussein regime meant that Iraq needed a new government, and the new system needed to reconcile

three emerging political entities within Iraq: the newly empowered Shia majority, the Sunni minority favored under Saddam, and the Kurds, who sought autonomy for their northern provinces. With coalition assistance, Iraq struggled to build a functional government. The CPA transferred power to the new Iraqi government on 28 June 2004, with Ayad Allawi named interim prime minister.[7] The interim government held Iraq's first open democratic elections on 30 January 2005. Sunni political leaders succeeded in leading a Sunni popular boycott of these elections, but this boycott strategy backfired: already in danger of marginalization, the Sunni population found itself excluded from legitimate claims on political power by refusing to participate in the political process. The Sunnis would turn out in large numbers for the December 2005 Iraqi parliamentary election, but the Shia United Iraqi Alliance won the most seats.[8] Nouri al-Maliki emerged from the process as Iraq's prime minister in May 2006 after a series of debates and deals among various political factions.[9] His administration continued to marginalize the Sunni minority, setting the stage for the Islamic State's rise through 2014.

Third, the US undermined its legitimacy, and the legitimacy of its support to the Iraqi government, in two events. The Abu Ghraib scandal in May 2004 damaged US prestige and support within Iraq and around the world as details of widespread prisoner abuse emerged. While the prisoner abuse was not strictly repression, it altered perceptions of American intentions and actions in Iraq. The massacre of civilians by American Marines in the Anbari town of Haditha in November 2005 further galvanized the Iraqi population and led to decreased support for continued American presence into 2006.

While AQI under Zarqawi's leadership envisioned a caliphate based in Iraq, Zarqawi and his leadership cadre recognized that it would not happen overnight. In his February 2004 letter to bin Laden, Zawahiri outlined his strategy to create the caliphate through a campaign of violence aimed primarily at the group he identified as "the heretics": Iraq's Shia population. He sought to target Shia civilians to provoke a civil war between the Shia and Sunni. In his view, Iraq's Sunni minority constituted a latent political and military force that had fallen to false political leaders. Attacking Shia targets would "awaken the slumbering Sunnis, who will sense the imminent danger and the cruel death that these Sabeans have in store for them."[10]

Zarqawi identified attacks against the Shia as his primary tool to foment this civil war but also noted targets in three other categories.

He declared that American forces "are an easy prey" that should be killed or captured and exchanged for Sunni prisoners and leaders. The Kurds are "a thorn it is not yet time to extract" but would be confronted in the future. Finally, he listed soldiers, police, and collaborators as "the eyes, ears, and arms of the occupier" who would be attacked to prevent the Iraqi state and its American allies from consolidating power.[11] Soldiers and police are the agents of the Shia state and the key actors in keeping the Sunni from awakening and seizing political power. Zarqawi also declared his intention for attacks to begin in earnest "four months before the government is constituted." With Iraq's election scheduled for January 2005, his terror campaign should expand starting in August/September 2004.

Zarqawi's guidance is unique among other AQ works produced around the same time for its focus on the Shia, but it echoes other jihadist works in its call for attacks on weak points and civilians. Naji's *The Management of Savagery* calls on jihadists to embrace the cruelty that true jihad requires. Naji characterizes jihad as "violence, crudeness, terrorism, frightening (others) and massacring."[12] Zawahiri's *Knights Under the Prophet's Banner* calls on attackers to maximize civilian casualties and kill as many people as possible, as "this is the language understood by the West, no matter how much time and effort such operations take."[13] Zawahiri would later rebuke Zarqawi's excessive violence and attacks against Shia civilians, arguing that attacks against Shia targets undermine resource mobilization strategies and detract from potential support.[14]

Taken together, these texts lay out a case for attacks against civilians as a key component to achieving victory over government regimes, but they also highlight the limit of ideology on target selection. When Zarqawi declared that "the only solution is for us to strike the heretics, whether they are men of religion, soldiers, or others, until they submit to the Sunnis," there is ample room to question what types of Shia targets the group should attack.[15]

AQI's main goal was to ignite a sectarian civil war between the Sunni population and Iraq's Shia population. This civil war would be the steppingstone to building a caliphate inside Iraq that would eventually spread beyond its borders.[16] It would spark neutral Sunnis into action against the Shia and help mobilize resources within Iraq and abroad. Zarqawi made inroads with some elements of the Sunni population, although their support fell short of fostering the civil war he wanted to inflame. However, he created an organization and an ethos

that his successors could build upon as the political situation in Iraq continued to deteriorate.

## The Islamic State of Iraq: June 2006–April 2010

Zarqawi's death did not cripple AQI, but it robbed the group of its leader as his plans were beginning to bear fruit. AQI's new leaders, Abu Ayyub al-Masri and Abu Omar al-Baghdadi, proclaimed the ISI as the caliphate in November 2006. They shared Zarqawi's hardline Salafi-jihadist ideology, and there were solid lines of intellectual continuity and organizational loyalty between leaders. International recruits flocked to Iraq to join AQ's dynamic affiliate and to carry jihad to the Americans. Abu Hamza al-Muhajir called on AQI members to attack one of two groups over 15 days starting on 7 September 2006 in honor of Zarqawi: they should either kill an American or a Shia civilian.[17] In a 2007 statement of the Islamic State's religious creed, Abu Omar al-Baghdadi established ISI as a Salafi-jihadist organization whose goal is to destroy apostates, heretics, and rejectionists.[18] Zarqawi was gone, but his vision of a Sunni caliphate lived on with his acolytes.

The security situation in Iraq continued to favor various insurgent groups. Between improvised explosive devices, suicide bombs, snipers, and small arms fire, AQI could hold its own against the coalition despite its overwhelming material advantage. The Americans had airplanes, but the terrorists had ingenuity and the ability to blend into the local population on their side. They also faced an adversary that was slow to recognize the nature of the conflict it found itself in, and the US military once again learned the painful lesson that adaptation in war takes time. Iraq's security forces were not up to the task of defending the country, and the Iraqi government was rife with infighting, sectarian collaboration, and corruption. Iraq's transition to democracy would have been difficult enough without terrorist groups attempting to collapse the system, and it was not made easier with Sunni and Shia militias, tribal leaders, Iranian proxies, and internationalized jihadists in the mix.

Zarqawi succeeded in driving Iraq to the brink of civil war, and his sectarian violence campaign undermined the state's governance and security. However, AQI's relationship with its Iraqi support base changed as the character of the organization continued to become

more internationalized. Continued bad behavior from AQI fighters led to disagreements and violence between the group cells and its former Sunni tribal allies, particularly in western and central Iraq. These groups were known as *Sahwa* ("Awakening") militias, and they played a major role in ejecting AQI from its strongholds in Anbar.[19] In the decision calculus of the *Sahwa* tribes, it was preferable to cast their lot with the Iraqi government and the coalition to resist the fighters they previously supported.

The United States doubled down on its counterinsurgency strategy and announced that it would commit additional forces to stabilize Iraq's security environment. Initially presented as the "New Way Forward" for Iraq, operations in the surge focused on clearing and holding key neighborhoods and districts in Baghdad as a component of a broader counterinsurgency strategy designed by the incoming multinational force commander, General David Petraeus. "The Surge" began in January 2007, and as additional forces arrived throughout the year, Baghdad's security situation improved. The US military also provided arms and intelligence information to the *Sahwa* forces, which gave them the capability to match up against ISI.[20] By late 2007, the combination of surge forces and *Sahwa* turned the tide against ISI, which would go into survival mode in 2008 and continue to suffer disastrous losses as it decamped for northern Iraq in 2009 and 2010. ISI reverted to its roots as a smaller terror organization with marginal operational capabilities between 2008 and 2010.

After years of uneasy relations between Iraq and the United States, the December 2008 Status of Forces Agreement contained provisions for the withdrawal of American military forces from Iraq's major cities by the end of June 2009, as well as restrictions on raids, arrests, and imprisonment of suspected insurgents. Most important, it established the American military's withdrawal by the end of December 2011. While the planned withdrawal did not put defeat into the jaws of victory, it complicated the security situation in two ways.

First, the coalition acted as a moderating influence between competing and antagonistic elements in the Iraqi political landscape. It may be accurate to characterize the Americans as the shield between Shia and Sunni elements that both sides tried to shoot through. With the Americans gone, the political pressure, assistance programs, and various carrots and sticks that the United States used to make these elements work together were gone. The United States was happy to pay the Sunni *Sahwa* forces to police their neighborhoods; the Shia-led

Iraqi government was not, and the jobs promised to former *Sahwa* members after the groups disbanded never materialized.

Second, ISI was in critical condition, but it was not dead. The impending departure of American forces provided a powerful motivation for ISI to hold on and wait for the situation to improve. The Maliki government's missteps and preferential treatment of Shia meant that it would still antagonize the Sunni minority, who ISI could count on for support. The focus on Baghdad's security during the surge meant that ISI could find sanctuaries elsewhere. By maintaining a low profile and stoking the fires of Arab/Kurd tensions in Mosul, ISI found a place where it could rebuild.

## Rebuilding: May 2010–May 2012

ISI appeared to be on the path to organizational extinction by the middle of 2010. Its leaders, Abu Omar al-Baghdadi and Abu Ayyub al-Masri, were both killed in a raid near Tikrit in late April.[21] Their deaths were part of the combined Iraqi and coalition efforts to secure Iraq before the US withdrawal in 2011. In a 4 June 2010 Pentagon press conference, Gen Ray Odierno stated that 34 of 42 of ISI's senior leaders had been killed or captured through the middle of the year. [22] In addition to these leadership losses, the group was rejected by the Sunni population it claimed to represent. Its former tribal allies, the *Sahwa* and Sons of Iraq militias, helped drive ISI from its havens in Anbar. The remnants of the group fled to Mosul in Nineveh Province, where they attempted to rebuild and recast their organization as the defenders of Sunni Arabs from the Kurds.

The ISI's new leader, Abu Bakr al-Baghdadi, inherited an organization that was a shell of its former self, and the group set aside its ambitions to establish a caliphate for more mundane tasks of organizational survival, rebuilding, and resource mobilization. To do so, the group's leaders focused on establishing organizational structures to plan, sustain, and operate at the provincial level. Baghdadi and his deputies would give guidance, and it was up to field leaders in the provinces to act upon it. ISI's ranks lost both Iraqis and foreign jihadists after the Zarqawi period. In rebuilding the organization, the new leadership decided to rely on Iraqi members rather than foreign fighters.[23] "Iraqization" made the group more palatable to Sunni Iraqi supporters, who were marginalized by the Shia government but also threatened

by foreign Sunni operating inside Iraq. Placing Iraqi faces in the insurgency also made local populations more likely to provide information to the group, based on family and tribal affiliations that foreigner fighters lacked.

In addition to these changes in leadership, approach, and membership, ISI retained a core of devoted fighters, as well as a plan to rebuild. While some ISI leaders displayed a previous willingness to analyze previous operations to derive lessons from the past, they also adopted western business practices to develop and publish strategic guidance for the future. Released in late 2009 and posted to a jihadi internet forum in January 2010, the "Strategic Plan for Reinforcing the Political Position of the Islamic State of Iraq" analyzed the operational environment within Iraq.[24] The plan's authors recognized that the Americans would leave Iraq by the end of 2011, and they needed to be ready to exploit the presumed vacuum that the American withdrawal would create.[25] Given this two-year window to restore and rebuild, the "Strategic Plan" presented a five-part strategy intended to re-establish ISI as the dominant jihadist group in Iraq while advancing the project to establish a new state in the region. The key point in the document is that the future caliphate dominated all other concerns.

The "Strategic Plan" focused on five components that shaped ISI's approach to operations. First, the plan's authors recognized that ISI was a single organization operating in the bigger sea of Iraq's insurgency. The first pillar, "unification," sought to bring these disparate organizations together under one leader to align efforts and establish direction. This included not only military planning but also establishing a consolidated government.[26] Although unsaid, ISI would be the core of this consolidated government.

The second pillar, "balanced military planning," presented a vision for the group's use of violence. Recognizing that the Americans would be leaving in 2010, the authors recommended that attacks focus on "cleansing" Iraqi security forces and assassination of military and government leaders. Attacks against Iraqi police and soldiers would not only deplete those organizations but also intimidate potential recruits from joining the Iraqi security establishment. Attacks should drive government security forces to abandon their more tenuous positions in some provinces and force them to retrench, creating power vacuums for jihadists to fill. This would create freedom of movement and action for the group to exploit and capitalize upon for its upcoming "caliphate project."[27]

The third pillar was a novel turn on a tactic that worked against ISI: the authors proposed the development of local jihadist militia councils modeled on the same *Sahwa* forces that helped drive them from Anbar. This proved to be a bit of foreshadowing, as some tribal elements that supported Zarqawi, but turned on his successors, would ally with the Islamic State as it returned to Anbar in force in 2014.

The fourth pillar, "taking care of the political symbol," called for strong political leadership to guide the group's efforts.[28] Although the plan was written before Abu Omar al-Baghdadi's death, it reflected a growing awareness of the group's need to establish itself as a legitimate claimant on political power. The caliphate would require a strong leader to advance it.

The final section, "assurance," emphasized the importance of including all Muslims in the coming caliphate, although given the group's ideology, the assumption is that it referred to Sunni Muslims. Considering the group's continued attacks on Shia and non-Muslim Iraqis, and their exclusion from services in Islamic State territories, the anti-Shia component of the Islamic State's vision was more important than concerns of inclusion for all Muslims or tolerance of non-Muslims in the future caliphate.

While the Islamic State was rebuilding, the United States was leaving. After withdrawing from major Iraqi cities in 2009, the US continued its drawdown in Iraq. President Obama declared that US combat operations were complete on August 31, 2010, and the military completed its withdrawal on December 15, 2011.[29] The transition from an American-led security response to an Iraqi one was mired in issues of equipment, training, mindset, and roles, but by the end of this observation period, Iraq's security forces were on their own.

The Arab Spring is another event that shaped Iraq's political context. Although Iraq did not see the sweeping protests and movements that led to regime change in Tunisia, Libya, and Egypt, as well as a prolonged civil war in Syria, Iraq was caught in a series of regional and national protests beginning in February 2011 and lasting most of the year. Frustration over the Maliki government's corruption in addition to the prospect of more sectarian strife between Shia and Sunni groups drove protests in the Shia south, the Sunni north, and the Baghdad region. Anecdotal evidence collected by Amnesty International documents widespread instances of intimidation and violence by state military and police forces.[30] The Iraqi state continued to rely on repression of its Sunni minority throughout the period, sowing

the seeds for the Islamic State's rise to prominence among insurgent groups and its expansion from its Mosul stronghold into Anbar.

ISI stepped back from its grand designs in Iraq to rebuild and re-organize with an eye to the future. Developing trust with former allies and establishing control in its home territories were key goals for this period. The group expanded into Syria disguised as Jabhat al-Nusra in January 2012. For an organization with an eye for messaging and propaganda, the Syrian Civil War provided a boon of resources and recruits, although these foreign fighters no longer occupied high posi-tions within the ISI. ISI needed foot soldiers, and Syria would pro-vide them.

## Preparations: Breaking the Walls and The Soldier's Harvest, June 2012–May 2014

By June 2012, ISI had restructured as an organization, improved its relationship with its support base, expanded its international re-cruiting and propaganda efforts, and covertly expanded into Syria as one of the leading rebel groups fighting in the Syrian Civil War. In-vesting in Iraqi leadership and personnel yielded dividends in opera-tional planning and execution, as improved local ties produced better information. ISI also benefited from the expertise of its former mili-tary members, as operatives demonstrated increasing sophistication in executing complex attacks in multiple cities with precision timing. ISI was building capabilities that it did not possess in any of its previ-ous incarnations.

Before declaring the caliphate, Abu Bakr al-Baghdadi needed to replenish the organization's ranks with experienced fighters. At the same time, the group sought to reclaim the territories it had ceded beginning in 2006. Baghdadi announced a campaign to meet these objectives on 21 July 2012. The "Breaking the Walls" campaign dem-onstrated new levels of operational and technical sophistication in the ISI operations.[31] It featured precise timing and an unprecedented number of vehicle-borne improvised explosive devices in Iraq's major cities. The organization attacked Iraqi prison facilities to liberate experienced fighters to rebuild its infrastructure and fill leadership positions.

While ISIS (Islamic State of Iraq and Syria) sought to replenish its fighting strength and undermine the state's ability to secure itself,

Iraq was caught in a series of protest waves sparked by the Maliki government's repression of sectarian protests. The attempted arrest of the Sunni finance minister Rafi al-Issawi after his denunciation of the Maliki government precipitated widespread protests throughout Iraq starting in December 2012.[32] The protests began in Anbar's capital, and antigovernment protests spread to Mosul, across Salah ad-Din and Diyala, and into Baghdad. As a result, the government mobilized military forces to prevent gatherings in Mosul and Baghdad.[33] A second wave occurred in late April 2013 after an Iraqi military officer was killed attempting to break up an antigovernment protest at a camp in Kirkuk's Hawija district.[34] Sunni elements mobilized in response to state repression, and armed clashes broke out in Kirkuk, Diyala, Salah ad-Din, and other provinces.[35] The Maliki government's policies and actions amplified existing tensions and further undermined local relationships with the central government, creating opportunities for the Islamic State to ally with local populations, or to at least appear to be a better alternative than continued misrule from Baghdad.

ISIS also announced its participation in the Syrian Civil War when Baghdadi declared that Jabhat al-Nusra was its Syrian proxy in April 2013.[36] The announcement revealed what had previously been the private details of a messy organizational divorce between the two groups, as Jabhat al-Nusra's leadership had been drifting toward AQ Central's leadership. Baghdadi claimed control over both Iraqi and Syrian operations when he announced ISI's new identity: the Islamic State of Iraq and al-Sham, or ISIS. The move provided an influx of resources and manpower to ISIS as a sizable portion of Jabhat al-Nusra's resources switched to ISIS, although many of these presumably remained in place, as ISIS dealt itself into the Syrian Civil War.[37]

"Breaking the Walls" appeared to be a successful campaign for ISIS. The group refined its operational capabilities in the yearlong effort, freed hundreds of its fighters from Iraq's prisons, and stormed back to some of its old haunts. The group seized and consolidated power in some of its former territories, while highlighting Iraq's relative inability to protect its population and institutions from attack. The successor campaign, "The Soldier's Harvest," was announced on 29 July 2013, and it capitalized on the breakthroughs and advances of "Breaking the Walls."

With "The Soldier's Harvest," ISIS intended to set the stage for the proclamation of the caliphate. Emboldened by its successes in Iraq and Syria, ISIS emerged as a challenger to AQ's leadership of the

Salafi-jihadist community. Although the strength of its leadership had waned over the years, AQ was the elder statesman of the international jihadist community. After splitting from ISIS, Jabhat al-Nusra aligned with AQ, whose leader, Ayman al-Zawahiri, sought to reconcile the two groups under AQ's senior position. Baghdadi rejected the idea outright, and the long, unsteady relationship between AQ and ISIS was finished by February 2014. Claiming the key leadership position in the jihadist world was one of the last steps before declaring the caliphate.

To ensure that the new state would survive, ISIS needed to withstand any challenge from the Iraqi government. If the caliphate could not survive an attack from Iraq, other external challenges would cripple it. For the caliphate to thrive, Iraq needed to be weakened further. "The Soldier's Harvest" would reach that goal by crippling Iraq's security forces and creating a climate of fear and intimidation among police. Despite the increase in the scope of violence, the heart of the campaign was a classic terrorist operation: it used violence to instill fear in an audience to achieve a political goal. In this case, the campaign intimidated police and the military by attacking them on duty and in their homes without warning.

According to interviews with Islamic State members, the campaign's brutality was designed to intimidate and radicalize Shia civilians, who would then attack neutral Sunnis, who in turn would organize to attack the Shia. This strategy harkens back to Zarqawi's attempt to foment a sectarian civil war.[38] The campaign also focused on the destruction of both military capabilities and morale.[39]

Both campaigns were contested by the Iraqi security forces. "Breaking the Walls" was a disaster for the Maliki government, as the campaign's successes—including a massive prison break at Abu Ghraib that freed 500 seasoned fighters—called its ability to defend itself, and the population, into question once again. The Iraqi government announced the "Revenge of the Martyrs" counterterror operations in August 2013, which was intended to take control of Sunni-held areas in Baghdad, Diyala, Salah ad-Din, and Nineveh. The government response included mass arrests and reported killings of Sunni groups. In addition, the government cracked down on protest organizers in Baghdad and protesters in Ramadi, Anbar's capital.[40]

The character of the Islamic State's campaign against the Iraqi government started to change in January 2014, as the group seized both Fallujah and Ramadi in Anbar Province. This marked the group's

return to its former strongholds. Fallujah and Ramadi were the first cities to fall as the Islamic State continued its expansion campaign. IS attacked other provincial capitals to consolidate power across northern Iraq. By the middle of June, IS fighters controlled Mosul in Nineveh Province and Tikrit in Salah ad-Din. The group also sought control of Samarra in Diyala, but Iraqi security forces rebuffed ISIS advances.

By the end of the campaign, ISIS's attacks were more like highly skilled light infantry or guerilla attacks instead of terror attacks. By the fall of Mosul, the group had developed the tactics, techniques, and procedures to defeat Iraqi military resistance.

As Prothero points out, "In each place ISIS took over after June 10, the same pattern repeated itself: local Sunnis harassed checkpoints and police stations with gunfire and mortar rounds, pinning down the garrisons until the arrival of ISIS suicide bombers, who flattened the structure. That would be followed by a high-speed assault of fighters in pickups, who'd surround the area and destroy whatever government troops remained or couldn't flee." [41]

The Iraqi government forces could not match this level of sophistication, particularly once suicide bombers were deployed. As an added benefit of resources from Syria, ISIS also expanded the use of suicide bombers for attacks like the one described above. Despite years of training and foreign military assistance, Iraqi security forces shattered under the strain of concentrated attacks. They would take years to reconstitute as effective military forces, leaving Iraq's western and northern regions under Islamic State control.

## Proclaiming the Caliphate: The Islamic State in 2014

Abu Bakr al-Baghdadi proclaimed the caliphate from Mosul's al-Nuri Mosque on 29 June 2014.[42] In the aftermath of two violent year-long campaigns and the complete collapse of Iraqi military forces in the north, Baghdadi's group focused on realizing its vision for a theocratic state. The Islamic State in 2014 faced the organizational challenges which accompanied its transition from covert terrorist conspiracy to internationalized insurgency to a de facto state controlling portions of Iraq and Syria. Islamic State leaders established bureaucratic institutions to govern at national, provincial, and local levels. It formed committees, studied the intricacies of such mundane topics as telecommunications, sewage maintenance, and bread

production, and advertised for immigrants to join the caliphate as a holy obligation. It created revenue departments to tax goods and services, seize and sell territory, and issue fines for infractions ranging from improper trouser length to lack of facial hair. IS also implemented its brutal version of *shari'a* law throughout its territories, and harsh punishment for infractions was common.

The Islamic State's transition to a functional proto-state meant that it needed to act more like a conventional state in some ways instead of operating as a small, covert, conspiratorial terrorist network, or as an open regional insurgency. The overriding imperative of territorial control required competent institutions and administrators to keep resources moving into the state's coffers. At the same time, the group's leaders at the local, provincial, and state levels were veterans of fighting in Syria or Iraq, whose skill sets and priorities were not generally given to the mundane tasks of public administration. Establishing new government structures and institutions is delicate, time-consuming work under the best of circumstances, with dedicated professionals working toward success in a secure, stable environment. The Islamic State could offer none of those prerequisites.

The transition from insurgency to an organization with state-like functions and structures introduced potential vulnerabilities that made the Islamic State more susceptible to air attacks. The Islamic State needed revenues to fund its new government, which it generated primarily through a combination of taxes on wages, goods, and services, illicit oil sales to internal and external markets, asset seizure, confiscation, fines, and foreign donations.[43] Bureaucratization and creation of hierarchies meant that senior and intermediate leaders could be targeted, given sufficient intelligence information. Its growing militarization and shift to heavier assaults in 2014 also created potential opportunities to target troops in the open. In theory, strategic aerial attacks against the Islamic State's coffers and means of revenue generation should damage its ability to provide services, govern its holdings, and sustain unit-level operations in the field.

These vulnerabilities may not have been as pronounced in June 2014 as strategic attack advocates suggest.[44] The Islamic State possessed many attributes of a functional political entity, but its leaders and organizational outlook were still rooted in its insurgent origins, with an emphasis on controlling people and territory through violence rather than some sort of latent political acumen. The group was far more reliant on oppression and terror against its new citizens than

on listening to grievances and modifying its practices. There was no opportunity for political opposition in Raqqa and Mosul, its main stronghold. Damaging the nascent state's economic power, and its ability to provide public goods and services, would not hasten the state's demise by fomenting unrest among a quiescent population. Moreover, the Islamic State derived the largest portion of its revenues from taxation of the local population. Although illicit oil sales were also a significant component of its revenue generation strategy, most of the sales were to locals in Iraq and Syria rather than abroad.[45] Early attacks to cut oil revenues would have dented the Islamic State's treasury but would not deplete it.

The strategic attack argument also relies on the notion that Islamic State fighters would abandon their efforts if they were not paid on time. This is not as outlandish as one might imagine: there is a rich history of terrorists and insurgents squabbling over compensation and how monies should be allocated.[46] Given the state's reliance on its fighters as the primary implements for both territorial and social control, it is likely that Islamic State leaders would cut spending on public goods and services in the face of decreasing revenues rather than defund the individuals keeping it in power.

As the following discussion of Mosul, Ramadi, and Fallujah demonstrate, the Islamic State's degree of control varied throughout its territory. Its control of Mosul was the product of a systematic campaign to establish itself as the dominant Sunni insurgent group in the area, combined with a weakened Iraqi government and military presence. Mosul was the Islamic State at its most state-like. In contrast, its approach toward Ramadi resembled more of a commuter insurgency, featuring attacks from the surrounding countryside. Fallujah was something of a hybrid case, where local Sunni leaders attempted to co-opt the Islamic State as a hedge against the central government and found themselves on the losing side of a devil's bargain. These different degrees of control throughout its territory suggest that a one-size-fits-all strategy would not be effective in attacking the Islamic State. The Islamic State could act both like a state *and* as an insurgency depending on region.

## ISIS at the Local Level: Mosul, Ramadi, Fallujah

Seated in northern Iraq at the geographic crossroads of Iraq, Syria, and Turkey, Mosul is the capital of Nineveh Province. It is Iraq's second largest city with a prewar population around two million people. Mosul's Kurdish population was displaced as a result of Baathist Arabization policies from the Saddam era, and a Sunni Arab majority developed in the city from the 1970s.[47] The population also includes small groups of Assyrian Christians, Yezidis, and Turkomen inside Mosul and in the surrounding countryside.[48] Mosul lies beyond Tikrit, the northern vertex of the "Sunni Triangle," and the city's distance from Baghdad and its large Sunni population made it home to many former members of the Saddam-era Iraqi military.[49] The city's relative distance from Baghdad also offered sanctuary to insurgent and terrorist groups during the Iraq surge and *Sahwa* movement in 2007. While the Maliki government and its coalition partners devoted considerable effort to stabilizing Mosul during the surge, the local ethnic and political dynamics caused the security situation to deteriorate further after the final American withdrawal in 2011. AQI's remnants had found sanctuary in Mosul since 2007 and manipulated the city's fractured ethnic composition to work itself into a dominant position over the Sunni nationalist and jihadist groups operating in and around the city.

Nineveh's governor, Atheel al-Nujaifi, played a dangerous double game intended to weaken the Maliki government's power in the north. First, he allied with the Kurdish minority to gain support in the region, which undermined the Sunni majority. This made Mosul's Sunni population more likely to support insurgent groups who defended their prerogatives. Second, he launched a campaign against the authority and legitimacy of Iraqi security forces, which created a chasm between the Iraqi Security Forces and the people of Mosul that they were ostensibly in the city to protect. The local government would have to rely on these same forces to protect the city and establish order while Sunni insurgent groups found support among the marginalized population.[50] This deteriorating security situation made it even more attractive to the Islamic State.

Mosul's position in northern Iraq made it an ideal location for the remnants of AQI to regroup and rebrand itself as the Islamic State. The city was an important Iraqi hub for smuggling routes with Syria and Turkey.[51] Manpower, money, and resources flowed between all three states. These routes made it much easier for the Islamic State to

sustain its interests in eastern Syria as the civil war escalated in 2012. Mosul was the epicenter of the Islamic State's expansion into the Syrian Civil War, first under the guise of the al-Nusra Front in 2012, and later as the Islamic State of Iraq and the Levant in April 2013.[52] Even as the Syrian cites of Deir ez-Zor and Raqqa grew in importance to the Islamic State, Mosul remained the group's prized territorial possession in Iraq.

The Islamic State was one of several Sunni groups who used Mosul as a stable base of operations. The Naqshbandi Army, Islamic Army of Iraq, and Jamaat Ansar al-Islam all operated in and around Mosul. As Sunni nationalists, the groups often claimed attacks against Iraqi "Safavid" or Shia government targets.[53] They also existed in an uneasy environment of conflict and cooperation. For example, the Naqshbandi Army took the lead in attacks against military and police throughout the city, which benefited other insurgent groups by weakening the security environment.[54] The Islamic State took advantage of this violence to establish protection and taxation rackets inside the city, while turning their attention to attacks in the city which would facilitate their eventual attempt to seize control.[55]

The Islamic State played a "long game" in Mosul. Instead of attempting a takeover in 2012 or 2013, the group waited patiently to build its capabilities, attract manpower, and gather resources. The group continued to cultivate its networks in Mosul even as it expanded into the Syrian Civil War, which provided a training ground for new recruits and an opportunity to advertise and attract even more resources.

However much the relationship between local and federal government had deteriorated, the Iraqi state maintained an active administrative and security presence. Police and military forces sometimes threatened or intimidated the locals, and their numbers were nowhere near authorized levels, but they were still present in Mosul.[56] Mosul's fall shattered Iraq's northern military forces, causing thousands of soldiers to flee south. Primed by victories in Anbar, Mosul's collapse from within gave the Islamic State equipment and money to continue its offensive in the north and to turn its attention in Iraq toward Baghdad.[57] Even with gains in Iraq and Syria, Mosul remained an essential piece of the Islamic State's territorial ambitions.

Mosul was the Iraqi centerpiece of the Islamic State's caliphate project. It represented the Islamic State's high-water mark in terms of territorial control inside Iraq. Although Abu Bakr al-Baghdadi

declared Raqqa as the group's capital, Mosul was the Islamic State's home for almost a decade. The city grew to represent everything that the Islamic State sought to achieve in its territories. The group implemented its vision for a theocratic state in northern Iraq, and Mosul was the heart of the project. This meant that the group could exercise its own style in terms of governance, revenue generation, and societal behavior. Mosul was the only location inside Iraq where the Islamic State wielded unchecked control over a city, free from outside interference or military threats.

Mosul was the last major city under Islamic State control. By October 2016, the Islamic State's fortunes had reversed. The Haider al-Abadi government had managed to curb the anti-Sunni excesses of the Maliki government. The Iraqi military staunched the bleeding and reconstituted its broken units. Ramadi was cleared in February 2016, while fighting in Fallujah ended in late June. While the Iraqi military knew it would be a long fight, successes in Anbar provided a much-needed morale boost, even as uncertainty overshadowed planning and execution concerns.[58] The Iraqi military prepared for a long siege in Mosul, with peshmerga militias providing security for Kurdistan and Coalition allies conducting airstrikes. Unlike Fallujah, the Islamic State dug into its defense of Mosul, even as evidence appeared of limited resistance to the group inside the city.[59] The Islamic State's security apparatus ensured that Mosul's population would be quiescent, although the group threatened to kill civilians as they fled. There was limited resistance in the city, even as Iraqi forces began to clear Islamic State positions in mid-October 2016. Fighting continued until July 2017, when Iraqi prime minister Haider al-Abadi declared the city was liberated.[60]

## Ramadi

Ramadi is Anbar Province's capital city. Like Fallujah, it featured prominently in the Sunni insurgency that followed the American-led invasion in 2003. For Abu Musab al-Zarqawi and AQI, Ramadi was a valuable asset. Many of Ramadi's tribes sided with Sunni rejectionists and insurgents, as they resented foreign intervention in Iraq and feared the role that Iran would play in an Iraq governed by a Shia majority. From 2003 to 2006, insurgent and terrorist groups found support among Ramadi's Sunni tribes.

This favorable environment proved to be short lived. While Ramadi's leaders shared a common cause with Sunni insurgents, repeated violations of tribal norms forced some tribal leaders to reevaluate their ties with AQI. AQI's reliance on foreign fighters did not sit well in Ramadi, as the group's fighters did not observe tribal customs. This festering resentment may also be explained by economics: AQI attempted to take over the profitable smuggling routes into Jordan that Ramadi's tribes operated.[61] Faced with a choice between increasingly unwelcome guests, a deteriorating security situation, or siding with the government and the coalition, a few tribal leaders elected to go a new way by creating tribal militias to tackle the terrorist problem. The initial groups became the core of the *Sahwa* movement, also known as the "Sons of Iraq" program. In conjunction with the American troop surge of 2007–2009, the "Anbar Awakening" was viewed as a crucial component in defeating AQI. The remnant of AQI decamped for Mosul in 2007–2008, but an eventual return to Anbar and Ramadi was an integral component to the group's future.

Ramadi was caught in a tug-of-war between the Iraqi government and the Islamic State. Ramadi's local leaders were hostile to the government but not to the extent of Fallujah's leaders, who thought they could ally with the Islamic State to use them as a check on the Shia government. Ramadi's Sunni leaders could put aside many of their issues with the government in the fight against the Islamic State. Despite the resistance they faced, the Islamic State was invested in seizing control of Ramadi. The city would be a prestigious conquest, and controlling it made it easier to move people and material throughout the Islamic State's holdings in Syria and Iraq. Ramadi and Fallujah also sat on the western approaches into Baghdad, which made them important staging areas for any attacks into the Iraqi capital.

Sunni hostility toward the government made Ramadi a fertile ground for the Islamic State to flourish, but the group seems to have missed the opportunity to make early gains inside it. The Islamic State focused on control of Raqqa in Syria for most of 2013.[62] Given the group's limitless ambition and somewhat limited capabilities in 2012–2013, it lacked the resources to exploit and widen the gulf between the state and Anbar's cities, even as protest waves continued to spread throughout the country. The Islamic State did not mount a serious challenge in Ramadi, but it appears that the group was preparing to do so, particularly in the deserts of western Anbar.[63]

Incensed by broken promises and increased state repression, Ramadi emerged at the forefront of the Sunni protest wave that spread through the country in December 2012. Protesters established a semi-permanent camp near the city from December 2012 to December 2013, as a national protest wave progressed through the rest of the country. Sensing an opportunity to capitalize on antigovernment protests and rhetoric, the Islamic State returned to the province, ostensibly to defend and champion the Sunni people. Fighters moved from Syria into Iraq, as the new Islamic State attacked bridges and roads leading into Ramadi from western Iraq in September 2013. Islamic State members marched in a parade in the city in November 2013.[64] In a move that stoked the fires of antigovernment resistance to a critical point, government officials arrested the prominent Ramadi Sunni parliament member Ahmed al-Alwani on 28 December 2013, killing his bodyguards and family members in the process.[65] In response to tribal unrest and Islamic State presence, Iraqi forces massed in Anbar province to restore order. This move gave the Islamic State the local support it needed to carry out attacks in Fallujah and Ramadi in attempts to seize control of both cities, in addition to smaller towns like Hit and Al-Karmah.

The security situation deteriorated in January and February 2014, when the Islamic State made its first serious attempt to seize control of both Ramadi and Fallujah. The group established positions throughout the city and fought openly against state and tribal militia forces, with territory switching hands between the Islamic State and its opponents. Neither the Islamic State nor combined Iraqi forces could take and hold territory throughout the entire city, and Islamic State pockets formed in Ramadi's northern and southern neighborhoods.[66] This period also provided a grim foreshadowing of the conflict to come: Iraqi forces could not conduct sustained offensive or defensive operations against a determined opponent. Islamic State members operated in the open, and state forces were limited in their movements. The terrorist group also took control of state facilities in some Ramadi neighborhoods.[67]

The Islamic State continued to operate with relative freedom throughout Ramadi from March through September 2014 despite the state's overall control of the city.[68] With Fallujah under its control and an unchecked presence in the desert west of the city, Islamic State fighters had no need to exercise direct control over the city. Instead, the group could wage a "commuter insurgency" from its strongholds

without investing manpower to hold gains in the city.[69] They could enter the city at will and conduct attacks to prepare for a future attempt to seize control. In comparison, the Iraqi military and government struggled to respond to losses in the north in June 2014 while attempting to retain possession of its territory.

The advantage shifted to the Islamic State by October 2014 as the group consolidated its initial gains and began to cycle more of its fighters into Ramadi. By the middle of the month, Iraqi forces had fallen back to central command posts and left more than half the city under Islamic State control.[70] The Iraqi military, beleaguered by losses in the north and in Anbar, could not maintain an effective defense inside the city. The Islamic State could afford to be patient as the Iraqi government and military attempted to staunch the bleeding from a series of humiliating defeats throughout the remainder of 2014 and into April 2015. Although control was not complete, the situation nevertheless favored the Islamic State.

The Islamic State seized government and administrative buildings in Ramadi's city center as a depleted Iraqi police and military fled the city.[71] The Islamic State declared that it had taken control of Ramadi on 17 May 2015.[72] This period of complete control was similar to those seen in other towns held by the Islamic State: the group attempted to rebuild the city and shape the population into its vision of an Islamic state. In Ramadi, this included the creation of bureaucracies and social and governmental institutions to advance its vision, as well as exerting control over the city's economy and public utilities.[73] Although the group was brutal, its efforts toward service provision and governance indicate that it had a genuine interest in building a vision of the future.[74] However, this period of complete control only lasted through September 2015.

Unlike Fallujah and Mosul, when police and military forces left Ramadi, other Iraqi forces were coming to surround it. Although the Iraqi military lacked the organization and equipment to launch an immediate campaign to take back the city in summer 2015, these forces were strong enough to create a partial perimeter around it. Ramadi may have been under Islamic State control, but the city was under a government siege and tribal militia siege at the same time. The Islamic State used terror attacks to offset the state's conventional military advantage as the Iraqi military buildup continued through October 2015, but these efforts were not enough to stop the combination of military forces, tribal militias, and airstrikes used from October

through December to eliminate Islamic State positions. The group lost its dominant position at the end of 2015, and Iraqi prime minister Haider al-Abadi declared that Iraqi forces had liberated Ramadi on December 28, 2015.[75]

# Fallujah

Fallujah lies at the halfway point between Ramadi and Baghdad in Anbar Province. The city saw some of the heaviest fighting of the US-led invasion after the murder and mutilation of private security contractors in late March 2004. The intense battles between coalition forces and insurgents in April 2004 and November–December 2004 left 70 percent of Fallujah's infrastructure in ruins.[76] Fallujah remained important to Sunni insurgents during the Coalition troop surge and the "Anbar Awakening" movement in 2007. Although it lies in Anbar, its relative proximity to Baghdad mitigated the importance of the tribe as a unit of political influence. However, the city retained a profoundly anti-Shia outlook with other towns in the province. The city's Sunni Arab majority resented government interference and the perceived Iranian influence in Iraqi government policies.

Fallujah's importance to the Islamic State and its organizational antecedents cannot be overstated. As a perennial hotbed of Sunni dissatisfaction with Iraq's Shia majority government, Fallujah was a key to Abu Musab al-Zarqawi's reign of terror from 2003 to 2006. The Sunni community's perception of continued marginalization during the Maliki administration stoked the fires of unrest as the Islamic State began its ascent.

Fallujah's residents participated in the antigovernment protests and demonstrations as part of the nationwide protest cycle in 2012–2013.[77] This antigovernment sentiment created an opportunity for the Islamic State to inject itself into the city's political environment by presenting itself as the defender of the Sunni population against the Shia central government. Fallujah's city council appears to have recognized the threat that the group posed to its leadership, but they believed that the Islamic State served a useful purpose in defending the city against Iraqi government forces. Furthermore, the Islamic State was a one of several Sunni antigovernment groups operating in the city with the reluctant permission of Fallujah's leadership.[78]

These fears proved to be well-founded. Fallujah was one of the first Iraqi cities to fall under Islamic State control. Unlike Ramadi, which experienced back-and-forth fighting between the Islamic State and Iraqi forces, Fallujah's fall to the group was quick. Islamic State members traveled from Syria through Anbar's desert to converge on Fallujah in late December 2013. Even if the group was not yet the dominant force in the sea of insurgent groups and Sunni tribal militias, there was a shared understanding that the Shia government was hostile to Sunni interests. This understanding manifested as a common set of shared priorities.

The Islamic State turned on its local hosts in Fallujah and against its fellow Sunni insurgents after January 2014, as the group cemented its control in Fallujah. The group's battle flag flew throughout the city, and government administrators, soldiers, and police had fled the city, foreshadowing Mosul's collapse in June.[79] Although Fallujah's city administrators attempted to control the group, Islamic State members were well armed and willing to use terror within the city to crowd out competitors and establish rule over the city.

Fallujah was left in Islamic State hands for over two and a half years. The Iraqi government prioritized action against other cities in Anbar over Fallujah, and the state focused its efforts in late 2015 and early 2016 on recapturing the provincial capital, Ramadi. The state needed to reconstitute its military after the humiliating defeats in 2014 and lacked the capabilities to conduct the type of sustained offensive operations needed to oust the Islamic State from urban centers. Local militias and Shia Popular Mobilization Forces launched rockets against Islamic State positions in Fallujah but did not execute any significant operations to retake the city.[80] However, the Iraqi Army was able to cut supply lines into the city as part of the overall campaign to eject the group from Anbar in late 2015.[81]

The combination of brutal internal policies and dwindling supplies began to weaken the Islamic State's hold on Fallujah. The first cracks in the Islamic State's dominance appeared in February 2016, when reports of armed opposition filtered out of the city. Small groups of youths inside the city burned Islamic State buildings over growing resentment about the lack of food and how locals were treated.[82] Conditions worsened as the Iraqi military, police, and Shia militias prepared their assault on the city, which began on 22 May 2016.[83] Iraqi officials declared that the city was secure in late June, as Iraqi forces and their allies turned their attention toward Mosul.[84]

# Whither Syria?

Syria played an important role in the Islamic State's operations, structure, and mythology. The Islamic State entered the Syrian Civil War under the guise of Jabhat al-Nusra in summer 2011, and the group quickly benefited from its expansion from Mosul in northern Iraq into eastern Syria. Syria provided three critical functions for the group. First, fighting in Syria was an essential component of the Islamic State's resource mobilization strategy. It was a beacon that attracted international recruits who wanted to "do jihad." Second, it offered a training ground for new fighters. Third, Syria was a sanctuary for the Islamic State outside of Iraq's territory, particularly after the group seized Raqqa in January 2014.

The struggle against the Assad government in Syria was a powerful tool in attracting people, money, and resources to the Islamic State. Syria also provided the group with a steady flow of recruits flocking to the region to participate in jihad and liberate Syria from the Assad regime. Syria also acted as a training ground where Islamic State fighters gained experience fighting in Syria, and the survivors would be more useful to the Islamic State's operations in Iraq.[85] The group also used its Syrian theater to minimize disruption of the caliphate program in Iraq. Syria provided a place to send international members to fight while allowing the IS to consolidate its senior leadership and focus on the Iraqi nature of the group. After seeing the negative effects of foreign fighters and their role in galvanizing Sunni support for the Awakening Councils in Iraq, the Islamic State attempted to minimize their impact on operations in Iraq, with the notable exception of using foreign fighters to conduct suicide attacks.

# Conclusion

By June 2014, the organization known as the Islamic State had moved beyond its roots as a small, localized insurgent group as the victor from the fractured and competitive insurgent landscape inside Iraq. Despite crippling setbacks over a decade, the Islamic State appeared to have succeeded, where other insurgencies failed, in carving out a new state from territories belonging to Syria and Iraq. Far from its roots as a small terrorist group of Jordanian expatriates, the Islamic State in June 2014 controlled millions of lives and established the

infrastructure and bureaucracies necessary for administering a modern theocratic state, while also expanding its influence in Libya, Egypt, Yemen, Nigeria, and Afghanistan.[86] Yet its transition from insurgency to state was incomplete as the first airstrikes of what would become Operation Inherent Resolve began, and this incompleteness introduced uncertainty over the nature of the enemy, and uncertainty in the minds of politicians and military planners about what strategies could be most effective in defeating it. The Islamic State could mobilize internal resources like a state, and it could act like a state in Mosul or Raqqa, but it also retained the flexibility to act like an insurgency in Fallujah or Ramadi. Even as the Inherent Resolve campaign rolled back the Islamic State's territorial gains and Iraqi forces regained control of IS strongholds, the group's remnants could revert to acting as small, independent cells.

As this chapter has shown though, the loss of most of its senior leaders, sanctuaries, and resources was not enough to drive the group to organizational extinction in 2006 or 2010. This survival imperative functions today as well: although its reach and capabilities are a shadow of what they were in 2014 and 2015, the Islamic State's remnants managed to survive coalition air attacks throughout its territories and an urban slugfest in Mosul that conjures images of Stalingrad in 1943. Whatever the capabilities of military force in the twenty-first century may be, they are not enough to eliminate an ideology.

## Notes

1. This chapter sometimes uses "Islamic State" rather than "the Islamic State of Iraq and al- Sham" (ISIS), "the Islamic State of Iraq and the Levant" (ISIL), or "Daesh," ('al-dawla al-islaamiyya fil-il-i'raq wa ash-sham), an acronym of the group's Arabic name often used as a pejorative.

2. Joby Warrick, Black Flags (New York: Doubleday, 2015), 55.

3. Warrick, 19–20.

4. For a brief primer on the core elements of Salafi belief, see Bernard Haykel, "On the Nature of Salafi Thought and Action," in Global Salafism: Islam's New Religious Movement, ed. Roel Meijer (New York: Columbia University Press, 2009), 33–57. The Salif al-Salih are the first three generations of Muslims in Mohammed's time.

5. Abu Musab al-Zarqawi, letter to Osama bin Laden and Ayman al-Zawahiri, February 2004.

6. Ayman al-Zawahiri, letter to Abu Musab al-Zarqawi, 9 July 2005.

7. Anthony Cordesman and Emma Davies, Iraq's Insurgency and the Road to Civil Conflict (Westport, CT: Praeger Security International, 2008), xxvi.

8. Dexter Filkins, "Iraqis, Including Sunnis, Vote in Large Numbers," New York Times, 16 December 2005, http://www.nytimes.com/.

9. Richard Oppel, "Shiites Settle on Pick for Iraqi Premier," New York Times, 22 April 2006, http://www.nytimes.com/.

10.  Abu Musab al-Zarqawi, letter to Osama bin Laden and Ayman al-Zawahiri, February 2004, in *Al Qaeda in Its Own Words,* ed. Gilles Kepel and Jean-Pierre Milleli (Cambridge, MA: The Belknap Press of Harvard University Press, 2008), 262–63. "Sabeans" is one of many derogatory terms that Zarqawi uses to refer to the Shia.

11.  Abu Musab al-Zarqawi, letter to Osama bin Laden, 262.

12.  Abu Bakr al-Naji, *The Management of Savagery* (2004), trans. Will McCants (Cambridge MA: John M. Olin Institute for Strategic Studies 2006), 31.

13.  Ayman al-Zawahiri, "Knights Under the Prophet's Banner," in Kepel and Milelli, *Al Qaeda in Its Own Words,* 202–3.

14.  Zawahiri, letter to Abu Musab al-Zarqawi, 9 July 2005.

15.  Zarqawi, letter to Osama bin Laden and Ayman al-Zawahiri, February 2004, in Kepel and Milelli, *Al Qaeda in Its Own Words,* 264.

16.  Charles Lister, "Profiling the Islamic State," Brookings Doha Center Analysis Paper Number 13, November 2014, 7.

17.  Brian Fishman, "Abu Hamzah al-Muhajir's 15-Day Strategy," Combating Terrorism Center at West Point, 8 September 2006.

18.  Abu Omar al-Baghdadi, "The Islamic State's Creed and Path," March 13, 2007, in Cole Bunzel, "From Paper State to Caliphate: The Ideology of the Islamic State," https://brookings.edu/, 38.

19.  *Sahwa f*orces were also known as "Sons of Iraq" outside Anbar and among US forces as "Concerned Local Citizens," or CLCs. The terms are interchangeable for this discussion.

20.  John Burns and Alissa Rubin, "U.S. Arming Sunnis in Iraq to Battle Old Qaeda Allies," *New York Times,* 11 June 2007*,* http://www.nytimes.com/.

21.  BBC News "Senior Iraqi al-Qaeda Leaders 'Killed,' " *BBC News,* 19 April 2010, https://news.bbc.co.uk/. Abu Ayyub al-Masri is also known as Abu Hamza al-Mujahir.

22.  Raymond Odierno, Department of Defense News Briefing, 4 June 2010, globalsecurity.org.

23.  Lister, "Profiling the Islamic State," 10–11. Iraqization has led some analysts to claim that ISIS is nothing more than members of Saddam's Ba'ath Party who have coopted Salafism for their own ends, while another camp argues that these Iraqi military elements converted to the group's radicalism. Either interpretation may be correct, but neither changes the reality that ISIS developed better intelligence collection capabilities and more capable field units prior to 2014.

24.  "Khitta istratijiyya li-ta'ziz al-mawqif al-siyasi li-Dawlat al-'Iraq al-Islamiyya," ["Strategic Plan for Reinforcing the Political Position of the Islamic State of Iraq"], February 2010, originally released at www.hanein.info.

25.  William McCants, *The ISIS Apocalypse* (New York: St. Martin's Press, 2015), 80; fn 60 "Strategic Plan," 6.

26.  Murad Batal al-Shishani, "The Islamic State's Strategic and Tactical Plan for Iraq," *Jamestown Terrorism Monitor* 12, no. 16 (August 2014): 6, https://jamestown.org/.

27.  McCants, *The ISIS Apocalypse,* 80.

28.  Hani Nasira, "Al-Qaeda in Iraq Resurfaces with New Strategy and Specific Operations," *Jamestown Terrorism Monitor* 8, no. 16 (April 2010): 4, https://jamestown.org/.

29.  Thom Shanker, Michael Schmidt, and Robert Worth, "In Baghdad, Panetta Leads Uneasy Moment of Closure," *New York Times,* 15 Dec 2011, http://www.nytimes.com/.

30.  "Days of Rage: Protests and Repression in Iraq," Amnesty International Report MDE 14/103/2011, April 2011, https://www.amnesty.org/.

31.  Sam Wyer, "The Islamic State of Iraq and the 'Destroying the Walls' Campaign," Institute for the Understanding of War Security Update, 21 September 2012, http://www.understandingwar.org/.

32.  Michael R. Gordon, "Tensions Rise in Baghdad with Raid on Official," *New York Times,* 20 December 2012, http://www.nytimes.com/.

33.  Sam Wyer, "Political Update: Mapping the Iraq Protests," Institute for the Understanding of War, 11 January 11 2013, http://www.understandingwar.org/.

34.  "Iraqi Sunni Protest Clashes in Hawija Leave Many Dead," *BBC News,* 23 April 2013, http://www.bbc.com/.

35.  "2013 Iraq Update #17: Iraq's Sunni Mobilize," Institute for the Study of War, 27 April 2013, http://iswresearch.blogspot.com/.

36.  Charles Lister, "Profiling Jabhat al-Nusra," Brookings Doha Center Analysis Number 24, 27 July 2016, 7, https://www.brookings.edu/.

37.  Lister, 13.

38.  Lister, "Profiling the Islamic State," 18.

39.  Lister, 18.

40.  Stephen Wicken, "Maliki Eyes Third Term: 2013 Iraq Update #34," Institute for the Study of War Update, 28 August 2013, http://iswiraq.blogspot.com/.

41.  Mitchell Prothero, "How Two Shadowy ISIS Commanders Designed Their Iraq Campaign," *McClatchyDC,* 30 June 2014, http://www.mcclatchydc.com/; Warrick, Black Flags, 302–3 presents a similar image report from Samara in Diyala province.

42.  Alissa Rubin, "Militant Leader in Rare Appearance in Iraq," *New York Times,* 5 July 2014, https://www.nytimes.com/.

43.  Stefan Heißner et al, "Caliphate in Decline: An Estimate of Islamic State's Financial Fortunes," International Centre for the Study of Radicalisation, 2017, 7–9. Based on data from a variety of sources, ICSR estimates that the Islamic State generated approximately $1 billion to $2 billion in 2014, $1 billion to $1.7 billion in 2015, and $520 million to $870 million in 2016.

44.  Benjamin Lambeth, *Airpower in the War Against ISIS* (Annapolis, MD: Naval Institute Press, 2021), 251–53.

45.  Heißner et al, "Caliphate in Decline," 7–8.

46.  Jacob Shapiro, *The Terrorist's Dilemma* (Princeton: Princeton University Press, 2013), 39–48.

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Chapter 2

# Air War as Politics by Other Means
## Operation Inherent Resolve

*J. Wesley Hutto*

*War is more than a true chameleon that slightly adapts its characteristics to the given case. As a total phenomenon its dominant tendencies always make war a paradoxical trinity—composed of primordial violence, hatred, and enmity, which are to be regarded as a blind natural force; of the play of chance and probability within which the creative spirit is free to roam; and of its element of subordination, as an instrument of policy, which makes it subject to reason alone.*

*All the factors that go to make up war and determine its salient features—the strength and allies of each antagonist, the character of the peoples and their governments, and so forth, all the elements listed in the first chapter of Book I—are these not all political, so closely connected with political activity that it is impossible to separate the two?*

*This is as it should be. No major proposal required for war can be worked out in ignorance of political factors.*

Carl von Clausewitz, *On War*

The relationship between politics and war is as volatile as it is contingent. Decisions of policy and war are built on predicting the reactions of allies and adversaries and forecasting how the actions taken will affect a target's values.[1] Because of problems of perception (among other things), predictions and forecasts are bound to be incomplete, generating reactions to which policy must then respond. This is readily observable in any contemporary political discussion. Were this all Clausewitz had in mind in the statement "War is an instrument of policy," his work *On War* would have likely been relegated to the military studies dustbin long ago.

"Politics" in Clausewitz's theory refers not simply to policymaking. Politics in *On War,* as Echevarria notes, is "an historically causative

force driving world events, creating variety and change in one historical era after another, and thus explaining war's various manifestations over *time*."[2] Villacres and Bashford reiterate this point, noting that while rational calculation and policy should precede the conduct of war, "war inevitably originates and exists within the chaotic, unpredictable realm of politics."[3] In part, Clausewitz devises a "paradoxical trinity" consisting of primordial violence (emotion), chance, and reason for the assessment of this "unpredictable realm" in which putatively rational policymaking resides.[4]

Sometimes described as the irrational, nonrational, and rational factors,[5] these forces influence war "'like an object suspended between three magnets,' . . . The actual path of the suspended object is never determined by one force alone but by the interaction among them, which is forever and unavoidably shifting."[6] In other words, while empirical analysis is often utilized to attempt rational prediction and forecast of potential outcomes of policy, to some degree emotion and chance always intervene in unpredictable fashion. Thus, it is not as if the rational, irrational, and nonrational forces of war are a key to be turned, a door to be unlocked, or a puzzle to be solved. Fog and friction in war and politics cannot be harnessed; they must be adapted to, rather than overcome. "War is an instrument of policy," and policy is a response to politics.

The strategic context leading up to Operation Inherent Resolve clearly illustrates these propositions. The character of the American air war on Islamic State of Iraq and Syria (ISIS), far from being a desirable course of action from the point of view of US domestic politics, was defined by ongoing conflicts in Iraq and Afghanistan that had soured the political appetite for American military engagement on the ground in the Middle East and distracted from growing threats in Eastern Europe and East Asia. After over a decade of seemingly endless American expeditions, the public's civic passion for involvement in the Middle East was waning, and the calculations of American politicians began to account for the disenchantment. Accompanying the exhaustion with the irregular warfare dominating US foreign policy was a recognition that much else was being ignored abroad. A revanchist Russia was making itself a nuisance at every turn, threatening to undermine US foreign accomplishments since the fall of the Soviet Union; a rising China in East Asia revealed its great power quest, generating US ambivalence regarding its ambitions in the Pacific Ocean. An additional factor, technological developments in precision

guided munitions (PGM) and remotely piloted vehicles (RPV) increased public intolerance for war casualties, and in turn increased support in the US for employment of PGMs and RPVs in the use of force as an instrument of national policy.[7]

This chapter describes the political context of the US air war against the Islamic State. The story is somewhat cyclical regarding the US's conduct of asymmetric warfare in limited conflicts. From Afghanistan, to Iraq, to Libya, and back to Iraq, the US Joint Force, whether aided by many partners or few, conducted similar limited air wars dictated by precision, to strikingly similar effect. Operation Inherent Resolve is the lone campaign around which consensus of a victory exists. The story is also one of novelty. After over two decades of unipolarity, challengers to the US's global role began to rise, and against them an American president elected on promises of ending the campaigns in the Middle East, resetting relations with Moscow, and pivoting its attention to Beijing. None of these promises came to pass; the forces of war demanded adaptation. Instead, just as the United States's attention was required to counter faits accomplis in Eastern Europe and the South China Sea, it was pulled back toward its prior commitments in Iraq to support a crumbling government it had stood up ten years prior.

The joint force's task in executing Inherent Resolve, then, was one of calculated measure. Wasting resources in wars, with a fatigued American public, was no longer an option, especially when those resources better served a recommitment to defend signatories of the North Atlantic Treaty and to maintain freedom of access, trade, and commerce in the Eastern Pacific. Operation Inherent Resolve, for the US, was a limited war of precision with a limited objective based on reclaiming territory, conducted through the air and in the "gray zone," using a whole-of-government approach, with the Department of the Treasury playing a surprisingly key role in conjunction with the US Agency for International Development and the US Air Force. The following sections describe in further detail the political events leading up to Operation Inherent Resolve, emphasizing the unconquerable forces that dictate American political behavior and choice, those of chance by independent actors and our adversaries, those of emotion represented by democratic public opinion, and those of reason, often necessitating a political adaptation to the other two. Undeniably, the air war against ISIS was a continuation of politics by other means.

## Irrational Human Passions:
## Unipolarity and Vulnerability

The politics of the late twentieth and early twenty-first centuries were first upended, and then reshaped by the events on 11 September 2001. The most powerful country in the world, the sole superpower, had been attacked, symbolically humiliated, and made to feel vulnerable by a small group of terrorists with connections to al-Qaeda, an organization with primary ties to the Taliban government in Afghanistan. The presidential administration of George W. Bush, having campaigned and begun its term touting restraint in its foreign policy, changed course as it mounted a response.[8] This was not without justification, for initially the attacks had triggered the human passions, reflected in a broad consensus across the American public for an invasion of Afghanistan. According to Woodward, the primary concern within the administration was not whether the invasion was the right decision, but whether the American armed forces could act swiftly enough to satisfy the public in conducting the invasion.[9]

We now know that this was only the beginning of American involvement in the region, as voices within the administration seized upon this emotional public and its recently discovered vulnerability to seek a new order of things across the Middle East entirely. Seizing upon a report out of Prague, administration officials began to publicly make claims of connections between al-Qaeda and Saddam Hussein's regime in Iraq.[10] While the Prague report proved to be false, the connection between September 11 and Iraq lingered in the minds of Americans. PBS NewsHour, for example, released an interview with two members of the United States Air Force in which the officers explicitly tied their service in Iraq to their memory of September 11.[11] Irrational as it might have been, the invasion of Iraq in 2003 was thus seen and supported by many as a logical continuation of the US response to September 11.[12]

The US investment in Iraq was significantly larger than that of Afghanistan,[13] but as soon as the conventional fight in Iraq ended and the irregular war against an Iraqi insurgency began, the similarities across the two conflicts ballooned. As in Afghanistan, "because of ingrained military weakness of the insurgents," Iraqi insurgents did "not seek to control territory and create an alternative government . . . but rel[ied] instead on internal and international psychological operations

fueled by terrorism, riots, guerrilla raids, sabotage, civilian casualties, and uprisings."[14] These operations further targeted the human passions of the people, seeking in part to evoke public weariness for the American adventures. In both cases, the insurgents performed this strategy fairly effectively, and seemingly in a coordinated fashion. As violence in Iraq began to subside in 2008, it was on the rise in Afghanistan.

The lingering wars in Afghanistan and Iraq generated higher casualty rates that precipitated significant reductions in public support for the war.[15] The Republican Party lost control of both chambers of Congress in the 2006 midterm elections,[16] prompting "even Republican leaders . . . to express doubts about the war's execution, if not its rationale."[17] The limited nature of the counterinsurgencies did the politicians no favors. Precision air strikes in combination with limited "boots on the ground" pursuing the winning of "hearts and minds" was creating positive operational numbers with no strategic result in sight. In the words of Secretary of Defense Donald Rumsfeld, "We know we're killing a lot, capturing a lot, collecting arms. We just don't know yet whether that's the same as winning."[18] It was not the same as winning; the passions of the insurgents were unmoved, and as a result, the rationale for US casualties in Iraq became less and less convincing.

Bruce Hoffman, in a 2004 RAND paper, likened the US's historical experience in unconventional conflicts to the 1993 film *Groundhog Day,* in which a news reporter is fated to live the same boring day in February over and over again: "The eternal cycle of repetition in which [Bill] Murray's character is condemned seems an apt parable to America's mostly ill-fated experiences in fighting insurgencies."[19] By 2007, it is safe to say that the majority of the American public was feeling the Groundhog Day effects. A new American president faced the public's weariness, having campaigned on drawing down the US commitment in Iraq, escalating the war in Afghanistan to bring swift victory, and developing a military more capable of confronting the more conventional demands of great power politics.[20]

## Rational Policy: The Campaign Promises of Barack Obama

Like most actions of the 44th president of the United States, the Obama administration's campaign promises regarding Iraq and Afghanistan were data driven. Asked in the 2008 Cooperative Election

Survey, "Would you favor or oppose moving US troops from Iraq to Afghanistan in order to fight al-Qaeda and Taliban terrorist operations in Afghanistan?," 66 percent of Republican respondents, 59 percent of Democrats, and 58 per cent of independents answered in the affirmative (the number of Democrats in support increased dramatically after the president's endorsement of the policy).[21] In a 2008 piece for *Foreign Affairs,* then-candidate Barack Obama argued that rationally, the only way to pressure the Iraqi belligerents to resolve their civil war "is to begin a phased withdrawal of United States forces, with the goal of removing all combat brigades from Iraq by March 31, 2008."[22] He buttressed this policy position with an emphasis on escalating the American commitment to Afghanistan to bring the conflict to a quick and decisive conclusion.

President Obama pursued the fulfillment of these promises throughout his first year in office. On 27 February 2009, the administration outlined its plan to withdraw most troops from Iraq by the summer of 2010, leaving a small contingent in the tens of thousands to pursue known terrorists and protect American personnel.[23] These withdrawals would allow the US to dedicate 17,000 new troops to the war in Afghanistan, and an additional 4,000 to train the Afghan army.[24] Obama reluctantly followed this in December with an additional commitment of 30,000 fighting troops, promising to begin their withdrawal in 2011.[25] These plans were clear and calculated, but as Clausewitz suggests, rational calculation is often upset by the unpredictability of political forces.

Only one day after implementation of the US withdrawal in December 2011, the Iraqi Prime Minister, Nouri al-Maliki, a Shiite Muslim, obtained an arrest warrant for his Sunni vice president on an accusation of supporting terrorism.[26] The recent absence of the US allowed this power grab, which marked the beginning of the end of a "stable Iraqi regime," and soon created a vacuum the Islamic State stepped into. Even before this, the trappings of liberal reform tempted the first term president to again elevate the US role in Middle Eastern politics.

## Interruption of Chance and Violence: The Arab Spring, Libya, Syria, and the Rise of ISIS

What began as a symbolic political self-sacrifice by a Tunisian fruit vendor soon swept across the Middle East and North Africa in a

flurry of protest, violence, and in some cases, revolution. The self-immolation of Mohamed Bouazizi on 17 December 2010, followed quickly by the transformation of a quarter-century old autocratic regime in Tunisia, became a model for other reform movements in Egypt, Libya, Syria, and elsewhere though its success was not as readily replicated. Wary of involving the US further into Middle Eastern conflicts, the Obama administration remained vocally supportive but rather ambivalent toward the movements into mid-2011. President Obama's ambivalence, especially with the uprising in Egypt, as one senior diplomat put it, is best described as a well-reasoned "high-wire act between positioning [the US] 'on the right side of history,' and not unceremoniously dumping a leader who has supported American policy."[27] Lingering in the background, however, was the lesson US officials had learned from years of fighting the insurgency in Iraq: democratic transformation is only one potential future for the political landscape in the Middle East. Egyptian President Hosni Mubarak stepped down at the urging of the United States and others on 11 February 2011, further fanning the flames of uprisings across the Middle East.

As with Egypt, the United States initially only paid economic and diplomatic attention to Libyan unrest. It was not until Col. Muammar Qaddafi's air and land assault on Libyan rebel strongholds began approaching Benghazi in March of 2011 that the UN approved Resolution 1973 to put in place a no-fly zone over Libyan territory, and the US, along with several of its NATO allies, committed arms to intervening militarily in Libya.[28] Important to the Obama administration, the decision received wide support from Arabs across the region, with the Arab League formally calling for the establishment of a no-fly zone. Crucially, the intervention had the financial and military support of Europe, but France and Britain had to convince the US to support the establishment of a no-fly zone,[29] since this would require resources that the US was ill-able to afford as it ramped up its exit timeline for Iraq and its reinvestment in Afghanistan.[30]

The US's participation in the Libya campaign may be thought to represent Obama's vision of the future for US warfare: limited, precise, and (perhaps most importantly) multilateral. In short, a war of low risk.[31] Even more limited than the wars in Afghanistan and Iraq, the Libya campaign cost only "a few billion dollars" and "no coalition or personnel were killed or seriously wounded" during the conflict.[32]

Karl Mueller describes the order of events after the initiation of the air campaign's first phase by French fighters outside of Benghazi:

> Within a few hours, the United States fired over a hundred Tomahawk land-attack cruise missiles (TLAM) at central nodes of Qaddafi's air defense system along the Libyan coast. The Royal Navy also participated in these initial TLAM strikes, though on a much smaller scale. With Libya's air defenses crippled, the coalition proceeded to fly multiple air strikes against other regime targets in Libya, including some B-2 bomber sorties launched from bases in the continental United States. Within 72 hours, the no-fly zone was established. Ultimately, twelve countries would participate in this operation, but the United States flew the vast majority of strike sorties.[33]

Within two weeks, US Africa Command transferred strategic and operational control of the Libya campaign to NATO. The speed with which this occurred again reflected the US interest in "leading from behind," a term interpreted by *The New Yorker's* Ryan Lizza to stem in part from a belief "that the relative power of the US is declining, as rivals like China rise." The contributor also noted the reality of the historical context: "The US keeps getting stuck in the Middle East."[34] Additionally, David Kilcullen argued that a US commitment to the Libyan rebuilding process was vital to the success of the small UN mission left behind.[35] Reflecting, President Obama referred to the lack of Phase IV planning in Libya as the "worst mistake" of his presidency in 2016, but the political calculations made in the moment were quite clear.[36] Having only recently drawn down its troop numbers in Iraq, emphasizing what it hoped would soon be a conclusion to the war in Afghanistan, the Obama administration found it politically necessary to rely on the assistance and support of allies for any further forays into Middle Eastern unrest.

The international pressure, support, and assistance the US received in Libya was not to be found in Syria, so the war weary United States was reluctant to engage in significant military action in Syria. Perhaps the primary reason for this hesitation was the lack of international consensus around a Syrian intervention. The disunity of the Syrian opposition contributed to this, but ultimately, the intransigence of Russia and China, historical allies of Syrian President Bashar al-Assad, stood in the way of any UN-sanctioned action.[37] Assad moved to squash his opposition with an iron fist, and in the civil war's opening

stages, the international community stood by and watched with hor-
ror. As the situation in Syria deteriorated, a battle-hardened group of
jihadists connected to the al-Qaeda network, known as the Islamic
State of Iraq (ISI), funneled waves of fighters into Syria to exploit the
sectarian conflict for its own advantage.

The beginning of ISI as an organized force traces back to the inva-
sion of Iraq in 2003, and its experience in fighting through two US
troop surges made the organization in Syria attractive to recruits, so
"many political neutrals (and increasing numbers of foreign fighters)
joined ISI simply because it seemed the most capable and professional
group."[38] By 2013, ISI had expanded its scope and mission in geogra-
phy and in name, formally declaring itself to be the Islamic State of
Iraq and Syria. The Obama administration initially downplayed the
group's expansion as it pivoted to more conventional international
challenges. This decision, of course, proved to be consequential.

## Rational Policy and Political Fog: The Russian Reset and the Pivot to China

The Obama administration had come into office hoping to culti-
vate cooperative relationships with regional powers Russia and
China. Obama and his foreign policy team immediately went to work
to mend the rapidly declining US-Russia relationship, for which they
blamed his predecessor,[39] and to make explicit competition with
China the Bush administration had successfully kept under the radar.[40]
Both efforts stumbled from the start. The Russia "reset" fell prey to
Russian revanchism, and the Asia pivot "fed into Chinese conspiracy
theories about alleged US containment and encirclement."[41] The de-
cline of the US relationship with both regional powers revealed itself
with striking clarity in late 2013 and early 2014 with the revelation of
Chinese island-building in the South China Sea and the Russian fait
accompli in Crimea. Each of these events created additional incen-
tives to refocus US foreign policy from the Middle East and toward
what was appearing to be an emerging multipolar system. Cumula-
tively, they animated the administration's reaction to the expansion of
the Islamic State from Syria into Iraq.

Despite the problems with the Asia pivot, the first term of the
Obama administration did a fairly good job of attracting US partner-
ships in East Asia. The new president signed a free-trade pact with

South Korea,[42] negotiated the Trans-Pacific Partnership,[43] joined the East Asia Summit,[44] signed the Treaty of Amity and Cooperation in Southeast Asia, tying the United States to the Association of Southeast Asian Nations (ASEAN),[45] and took an active leadership role in the ASEAN Regional Forum. US hopes for Chinese liberalization were consistently thwarted, however, as China built and developed transnational institutions to mimic and counter those of the West.[46] After the appointment of Xi Jinping in 2012, China's rhetoric and action took on added force, especially in its territorial disputes with neighbors.[47] These territorial disputes came to a head in the South China Sea beginning in December 2013, when intelligence revealed China's island building project.[48] While China has not clearly defined the scope of its maritime claims, its infamous nine-dashed line suggests that it seeks broad territorial and resource sovereignty rights over currently recognized international waters.

Unlike the early success in East Asia, the Russian reset, in hindsight, seems to have been doomed from the beginning. The word "reset" on a large red button presented by Secretary of State Hillary Clinton to her Russian counterpart was mistranslated into the word "overcharge;"[49] the years that followed the reset were largely marked by more of the same. Russian tensions with the West grew along with its conventional force exercises, *Zapad,* which involved a first-use nuclear attack on Warsaw.[50] Russian officials coupled these game-like scenarios with newfound comfort castigating NATO and its expansion for threatening Russian sovereignty.[51] In February 2014, less than two months after Chinese island building projects began in the South China Sea, disguised Russian forces seized part of Ukraine. After months of unrest and violent protests, armed "little green men" seized the parliament, as well as two airports in Crimea. The following day, President Putin secured approval from the Russian parliament to invade Ukraine, a fait accompli by Moscow.[52]

The US struggled to find an appropriate policy response in the fog of these events. Much of this difficulty has been attributed to the character of Russian and Chinese behavior since both countries skirted the lines of international law. Russia, for example, did not declare war on Ukraine but instead utilized standing international norms of self-determination and "Responsibility to Protect" as a shield for its Crimean venture.[53] Additionally, China continuously points out that as a party to the UN Conventions on the Law of the Sea, its interpretation of correct conduct under the convention

trumps that of the US, a nonsignatory party.[54] Each of these situations left the US with largely diplomatic policy responses, marked by aid to Ukraine, commitments to Southeast Asian partners, assurances of the US commitment to Article 5 of the North Atlantic Treaty, operations through and around the artificial islands to ensure freedom of navigation, sanctions, and combative US rhetoric toward these (seemingly) revisionist actors.[55]

Russia and China's actions shaped the political context in which the rise and expansion of ISIS occurred, as well as the level of attention the group received from the Obama administration. One month before President Obama infamously described ISIS as "the JV team,"[56] China began building artificial islands in the South China Sea. Only one month after Obama's comments, Russia's "little green men" seized the Crimean parliament. By late May, however, ISIS had made sufficient advances for President Obama to assess that "the most direct threat to America at home and abroad remains terrorism."[57] Within a month, ISIS took Mosul.[58]

## Rational Violence, Rational Response: The Expansion of ISIS

ISIS's drive into Iraq from Syria began in January 2014. Marked by speed and violence, its "war of movement" took the Iraqi cities of Fallujah and Ramadi almost immediately, followed by partial control of Tikrit. In the months that followed, ISIS control in Iraq expanded toward Baghdad, Nineveh, and the Kurdish regions. Notable to some, ISIS innovated, and far from modeling its guerrilla warfare tactics in Syria, the group began "acting more like a conventional army . . . running columns comprising dozens of technical, trucks, artillery pieces, and captured armored vehicles."[59] As for Iraq's forces, Maliki's politicization of the police and army after the US withdrawal mentioned earlier "had left their leadership corrupt, hollow, and lacking in skill or commitment."[60] The Iraqi forces were neither up for the challenge of confronting ISIS head on nor were they entirely willing to do so.

In referencing the expansion of ISIS, it has become routine to provide President Obama's ill-fated comparison of ISIS with a JV basketball team. What most leave out, however, is the statement that directly followed when he was challenged by the interviewer, "that JV team just took over Fallujah." The president's response was not defensive

but calculated: "How we think about terrorism has to be defined and specific enough that it doesn't lead us to think that any horrible actions that take place around the world that are motivated in part by an extremist Islamic ideology are a direct threat to us or something that we have to wade into."[61] Even as Obama's perspective on the threat posed by ISIS shifted, the political pressure of avoiding being pulled back into a Middle Eastern conflict was great, as was the implausibility of ISIS's complete eradication.[62]

President Obama's rationale in this regard likely reflected the position that there would be no US ground invasion to fight ISIS and no reoccupation of Iraq by US forces.[63] This was the result of a soured political appetite for American ground wars in the Middle East, and the elevated character of a Russian and Chinese threat in Eastern Europe and East Asia. As Kilcullen notes, attempting an invasion similar to 2003 "would have taken months or years to pull . . . together, and required logistic, military, and political resources that simply weren't available fifteen years after 9/11 and more than a decade after President Bush's initial, horribly ill-judged invasion of Iraq."[64] These resources were either being cut or diverted to East Asia with the intention of a "60-40 force structure rebalance by 2020."[65] And while commentators continued to bemoan the fact that the "US seems simply incapable of abstaining from Middle East conflicts,"[66] the political pressures of the pivot to Asia and the Russian invasion of Crimea in 2014 diverted resources and political will away from any substantial US intervention in Syria. The outcome, Operation Inherent Resolve, balanced rational policy, emotion, and chance: a remarkably integrated, multilateral political-military campaign, marked by emphasis on diplomacy and economic statecraft on one hand and a limited, precision-based air campaign on the other.

## Finding Balance between Three Poles: Obama's Anti-ISIS Strategy

On 10 September 2014, President Obama publicly announced and summarized the administration's anti-ISIS strategy, consisting of materials and training for anti-ISIS forces on the ground, an economic sanction and asset freezing campaign, the expansion of humanitarian assistance to victims of ISIS action, and the air campaign. The four components combined address multiple notional centers of gravity:

contested rule by other groups, as well as religious divisions and fractures across the ideological landscape; revenue; recruitment and population support; and ISIS fielded forces.[67] It is also evident that this strategy sought to balance the rational, nonrational, and irrational forces of war by mitigating the risk of radicalization among vulnerable populations through humanitarian efforts, imposing friction on the adversary by exploiting known political fissures in Iraq, and combining economic statecraft and the air campaign in a means-ends focused strategy.

US humanitarian assistance during Operation Inherent Resolve was a direct effort to undermine ISIS's popular support and stifle further recruitment to ISIS from these populations. The government announced that an additional $48 million would be added to the 2015 fiscal budget for humanitarian aid to the region, a combined total of $248 million. Of the additional funds, $37 million would be distributed through international and nongovernmental organizations on the ground in Iraq and Syria, with $11 million set aside for refugees of the conflict who had fled to surrounding areas. Voice of America described the aid as largely "providing food and clean water, shelter materials, latrines and sanitation infrastructure, hygiene kits, and other urgently needed relief supplies to help the 1.8 million people who have been displaced" by the conflict.[68] By August 2014, the refugee numbers flowing out of Iraq and Syria had already "caused severe overcrowding in hospitals and schools, increased unemployment and poverty levels, weakened infrastructure, and social and political instability."[69] US aid was meant to shore up humanitarian support during this crisis, which, if it worsened, would threaten to destabilize the greater Middle East. This was not only an effort to win hearts and minds throughout the refugee camp but also to rationally stabilize the region, which was key to maintaining limited US involvement.

The US effort to counter ISIS advances in the Middle East then focused on exploiting existing political fissures in Iraq, deploying 475 US service members to equip and train the Iraqi and Kurdish Security Forces. In late 2014, the US announced its plan to fund the development of "three Iraqi Army Divisions (9 Brigades), three Kurdish Brigades, and an initial Tribal Force that could serve as the basis for developing an Iraqi National Guard."[70] In addition to the service members, the US government contributed approximately $1.6 billion dollars to supplying the equipment necessary for the task. By 2017, the Pentagon was working closely with Operation Inherent Resolve,

which provided detailed analyses to identify further funding lines of effort.[71] The US focus on funding the anti-ISIS coalition was outmatched only by its attention to targeting and eroding ISIS's own financial base.

The Obama administration had long favored the economic stick of US foreign policy, having most recently targeted sanctions against cronies of Russian President Vladimir Putin.[72] Under the political pressures recounted above, sanctions and other forms of economic statecraft became the Obama administration's go-to limited response when faced with strategic dilemmas, to such an extent that the Department of Treasury's "under secretary for terrorism and financial intelligence was sometimes described . . . as President Obama's favorite combatant commander."[73]

The anti-ISIS campaign was no different. At its peak, ISIS was largely supported by $500 million in oil revenue, $500 million in cash from seized banks, and $350 million in extortion and tax revenue (per year). By 2015, ISIS's budget topped $2 billion, the equivalent of the gross domestic product of a small country.[74] ISIS's ability to control and manage the territory it had seized relied heavily on this funding, and the anti-ISIS coalition planned to target that funding directly. As the implementation of Operation Inherent Resolve unfolded, so too did an economic campaign spanning 60-plus countries and five lines of effort to cut ISIS financing. The campaign consisted of the intergovernmental Financial Action Task Force along with the Counter IS Finance Group led by Italy, Saudi Arabia, and the United States. It eventually forced ISIS to distribute most of its cash in warehouses throughout its territory. The US then embarked on a subsidiary air campaign, in part, to destroy these caches: Operation Tidal Wave II. The close coordination of the economic and military instruments made this strategy incredibly effective while limiting its scope militarily.

The balance achieved by the Obama administration among the nonrational, irrational, and rational forces of war in planning and carrying out the anti-ISIS strategy is evident in a 2017 RAND study, which highlighted the relative de-emphasis of the use of US armed forces in anti-ISIS operations: "Military force is necessary but is used to support diplomatic and economic efforts rather than as the primary tool for achieving strategic objectives."[75] Operation Inherent Resolve, the US air campaign against ISIS, was in this light, a supporting measure for the diplomatic and economic tools already put into play by the United States. Additionally, the new, more conven-

tional ISIS buoyed the campaign's effectiveness. ISIS also faced the fog and friction of the battlefield and could not overcome it. As Kilcullen explains, the war of movement that characterized ISIS's approach since 2013, while successful "against the demoralized Iraqi Army with its structural problems, capability shortfalls and political weaknesses . . . also made ISIS vulnerable to air power."[76]

## Conclusion: A War of Low Risk

Often, discussions of "context" situate political decision-making on strategy according to geographic factors, military capability, and desired ends. While this could and should be done, it largely misses the point that the character of the American air war on ISIS, far from being a desirable course of action in US domestic politics, was defined by ongoing conflicts in Iraq and Afghanistan that had soured the political appetite for American military engagement on the ground in the Middle East and distracted from growing threats in Eastern Europe and East Asia.

If "war is an instrument of policy," and policy is a response to politics, then tracking the actions and reactions of political decision-making around strategy and war is necessary to understand any contemporary decision. This chapter sets the political context out of which Operation Inherent Resolve developed and structures it according to Clausewitz's paradoxical trinity. The rational, nonrational, and irrational forces pervade US foreign policy decision-making, which is bounded by and in response to these forces.

These forces bounded the historical and political context of the US anti-ISIS campaign. The violent passions of those seeking a new order in the Middle East and the subsequent depressed passions of the American public presaged the rational calculations embodied in the campaign promises of candidate Barack Obama. The unpredictable events of the Arab Spring and the eruption of violence in Syria and Libya upended the fulfillment of these promises. Pulled back into Middle Eastern conflicts, the US was again stretched thin across the globe in its attempt to respond to the actions of a revanchist Russia and a rising China. The combination of these historical factors demarcated the bounds within which a US response to the threat of ISIS could take place. These factors are not deterministic, of course, but

they set the tone for Obama's vision of the future for US warfare—limited, precise, and multilateral.

There is certainly space for debate as to whether this is an accurate depiction of the future of US warfare. But presently, the capability of the United States to invest militarily in every part of the world is limited, and that limitation is only increasing as new regional powers emerge, and old regional powers experience a resurgence. The characteristics of Operation Inherent Resolve—limited, precise, and multilateral—is one outcome of this political context.

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## Chapter 3

# Diplomacy and the Syrian Civil War

*Mitchell Fossum*

*We're not choosing a military strategy of direct confrontation with the regime to try to get a political solution. We are working diplomatically.*

–James F. Jeffrey, former Special Representative for Syria Engagement and Special Envoy to the Global Coalition to Defeat ISIS

A war within a war; that is how history will record the US military's leadership of the Global Coalition to Defeat the Islamic State of Iraq and Syria's (ISIS) Syrian campaign, Operation Inherent Resolve. For four years, from late 2014 until the March 2019 declaration of victory over the so-called ISIS caliphate, significant and focused military efforts in Syria may have briefly obscured the persistent fact that the military instrument has always been secondary to the political process, but the drumbeat of time and the relegation of ISIS in Syria to a low-level insurgency has only made the case clearer. Two administrations' worth of policy toward the Syrian Civil War and regime of Bashar al-Assad have relied heavily upon a meandering and highly fractured political and diplomatic track. To understand the military campaign's evolving political context, one must examine policy, not simply through the lens of presidential transitions, United Nations Special Envoys, or even the relative rises and falls of forked or parallel political platforms. Instead, one must view the Syrian Civil War through the lens of a critical inflection point that occurred in December 2015.

Up until December 2015, policy debates and diplomatic energies involved sifting and working with the Syrian opposition forces, wavering on chemical weapons, and stating that "Assad must go."[1] Three UN Special Envoys failed to achieve lasting ceasefires or bring the parties to the negotiating table. However, in December 2015, the triplicate rise of ISIS, Russian and American interventions, and a large-scale refugee crisis brought a distinct moment of international unity through an appeal for a negotiated settlement to the civil war. This moment handed American diplomats the leverage to pass UN Security

Council Resolution (UNSCR) 2254, the council's unanimously adopted road map for a Syrian peace process.

Since December 2015, even with the shattering and freezing of the country from the continued advance of the Syrian army, Turkish military incursion, and persistent Israeli-Iranian conflict in the southwest of Syria, subsequent policy has doggedly chased a clear but difficult road map to conflict resolution in accordance with UNSCR 2254. This has been especially visible through the Syrian Constitutional Committee meetings and a mostly effective nationwide ceasefire since March 2020. Absent some unexpected diplomatic impulse during which the US elects to empower an alternative forum to the UN mandate, this process should be expected to persist as the official US policy for the resolution of the Syrian conflict. While some in the US military perceived stalemate and waning influence in Syria, looking through the diplomatic lens of a decade-long process which led to—and then relied upon—a singular moment of unity represented in UNSCR 2254 reveals that stalemate was not losing. It was winning—slowly.

## Shattering and Brinksmanship

Between January and the beginning of April 2011, small gatherings in Damascus in response to protests in Egypt and Tunisia led to local unrest in Daraa, just down the southbound road. On 1 April, protests which had organized around the main square in Douma and Omari Mosque were met with force when Assad sent in a "mix of soldiers, *mukhabarat agents,* and pro-regime thugs" to kill 12 and wound 44.[2] More than 150,000 attended the mass funeral. The spark for civil war had been lit. Initial American diplomatic outreach saw Robert Ford, the Ambassador to Syria, travel to Hama to express "deep support" for the Syrian people amid the burgeoning crisis.[3] Three weeks later, on 31 July, security forces and tanks assaulted the Hama provincial capital, killing 80 civilians. "Syria will be a better place when a democratic transition goes forward," President Obama stated in a subsequent statement.[4] The State Department then removed Ambassador Ford from the country on 25 October over concerns for his personal safety.[5]

As the Syrian conflict persisted into late 2011, the first threshold encountered by the Obama administration involved whether to commit American military forces. Given the asbsence of mandates from either

Congress or the UN Security Council and the lack of committed allies, an advanced humanitarian crisis, or a clearly identifiable Syrian opposition, the White House avoided a direct military involvement.[6] On the ground, however, the Free Officers Battalion and Daraa-based Alwiyat al-Omari joined with other militant parties to form the Free Syrian Army, which was formally announced on 29 July 2011.[7] With direct American intervention off the table, at least temporarily, western military support would be provided through organizing and arming the Syrian opposition. The US soon gave the nod to various regional players—including Qatar, Saudi Arabia, and Turkey—to fund and supply arms to the Free Syrian Army,[8] while nonlethal aid eventually flowed from the United States in the form of vehicles, computers, bulletproof vests, and night-vision goggles.[9] Furthermore, the Department of Defense (DOD) undertook limited and direct training of Syrian rebels within the restrictions of the administration's prohibition against fighting the regime.[10]

Then, even with the American president clarifying and reiterating his red line in December 2012,[11] the chemical weapons attacks commenced. After US government-reported instances of multiple small-scale use of chemical weapons against the opposition, a rocket attack in the Damascus suburb of Ghoutta on 21 August 2013 killed 1,429 people, including at least 426 children.[12] The Assad regime's loosening grip on its capital city drove it to vicious barbarism. Amid a flurry of diplomatic activity and US and French military mobilizations, Secretary of State John Kerry offered proof on 30 August in a speech describing the "rows of dead lined up in burial shrouds."[13] Before the day had expired, however, President Obama—influenced by the failed British parliamentary vote for intervention two days earlier, critical statements from Senators John McCain and Lindsey Graham regarding the folly of military involvement without a wider strategy, and the lack of a UNSCR mandate[14]—deferred the decision on the use of force to Congressional authorization.[15]

At a press conference on 9 September, Secretary Kerry dismissively remarked that Assad might avoid military action if he surrendered "every single bit of his chemical weapons to the international community in the next week."[16] Seizing upon this opportunity, the Russian Foreign Minister Sergey Lavrov announced that Russia would work immediately to convince Syria to surrender its chemical-weapons stockpiles. President Obama spoke with Russian President Vladimir Putin later that day on the sidelines of the G20 Summit, and

a deal was well underway. By the end of the month, US and Russian meetings in Geneva and Syrian government ratification of the Organization for the Prohibition of Chemical Weapons (OPCW) treaty led to the passage of UNSCR 2118—detailing steps the Assad regime would have to take to verify the destruction of its chemical weapons.[17] Despite the illusory breakthrough and its effect of preventing direct US military intervention, the subsequent failures of the OPCW-UN Joint Investigative Mechanism and Investigation and Identification Team were the subject of the US Ambassador to the UN's remarks as recently as 5 October 2020.[18] Moreover, the DOD has publicly named the Syrian regime responsible for seven distinct chemical weapons attacks carried out since UNSCR 2118's passage.[19] At the close of 2020, the US attributes more than 50 incidences of chemical weapons uses to the Assad regime.[20]

## Diplomacy's Initial Stumbles

Diplomatic efforts before UNSCR 2254 should be considered against the backdrop of Syria's descent into sectarian violence and the Assad regime being pushed to the brink. Three UN special envoys failed to bring about lasting ceasefires or political reform as opposition groups grew more organized and better equipped, ISIS emerged in the east and north, and Iran and its proxies staked a vital interest. In addition, Israel increased airstrikes on targets associated with the Iranian presence and Russia angled for influence. The Security Council often took center stage in the international gridlock of competing interests and priorities. An August 2011 joint statement "expressed concern over the deteriorating situation in Syria," but a British proposal later that month for targeted sanctions failed to even reachs the floor for a vote.[21] In October 2011, Russia and China vetoed a subsequent Security Council resolution condemning "grave and systematic human rights violations" and a calling for an "inclusive Syrian-led political process."[22] Furthermore, even a proposed UNSCR endorsement of an Arab League Action Plan for a Syrian-led political transition was subject to a Russian and Chinese veto in February 2012.[23] In seeking to blunt US influence on the region, any proposal resembling regime change was the diplomatic red line for these states.

On 16 March 2012, the first UN Special Envoy to Syria, Kofi Annan, submitted his peace plan to the Security Council calling for the Syrian

regime to cease "armed violence in all its forms" and accept UN monitoring of the nationwide ceasefire.[24] The Security Council agreed to the nonbinding statement, and Annan announced a positive response from the regime on 27 March. A brief lull in the fighting commenced on 12 April but lasted only a matter of days. By mid-June, the UN Supervision Mission in Syria, intending to observe, verify, and report on the ceasefire—established in UNSCR's 2242 and 2243—was suspended.[25]

A subsequent UN-sponsored conference in Geneva, known as Geneva I, met on 30 June 2012. In front of senior representatives of the five permanent members of the Security Council plus Turkey, Iraq, Kuwait, Qatar, and the EU, Annan laid out his vision for a "Syrian-led political process leading to a transition . . . that meets the legitimate aspirations of the Syrian people." A "review of the constitutional order" and "free and fair elections" were included as additional steps endorsed by the action group.[26] However, the display of unity, signing of the Geneva Communique, and endorsement of Annan's six-point plan failed to extend even to the ensuing and competing press events held by Secretary of State Hillary Clinton and Foreign Minister Lavrov. In answering the first question from the press pool, Clinton unequivocally stated that "Assad will still have to go."[27] Lavrov chaffed at the notion of preconditions to the proposed transition at his own press event.[28] With the French Foreign Ministry calling for war crimes trials for the Assad regime, and the Russians and Americans at loggerheads over the meaning of "transitional" and the proposition of sanctions for noncompliance with the six-point plan, Geneva I and its Communique ended in abject failure. Annan resigned on 2 August.[29]

The period from late 2012 and early 2013 witnessed the appointment of a new UN special envoy, Lakhdar Brahimi, and a new American Secretary of State, John Kerry. As a string of chemical weapons crises and brinksmanship in 2013 led to more UN-sponsored Geneva talks in January 2014, Geneva II found the parties' positions more entrenched than ever.[30] While still referencing the ratified Geneva Communique as the baseline political framework for conflict resolution, the newly organized Syrian Opposition Forces Coalition was invited to the table for direct talks with the regime. Despite the positive step of a dialogue being opened regarding prisoners, humanitarian access, and envisioning some type of "transition governing body by mutual consent," the talks failed to produce an agreement, beyond modest cooperation, related to aid for the besieged city of Homs.[31]

Brahimi then resigned on 13 May 2014, lamenting "how much more death, how much more destruction [would] occur . . . before Syria can become a new Syria."[32]

Brahimi was succeeded in the UN Special Envoy post by Staffan de Mistura, an Italian-Swedish diplomat, previously with the UN mission in Iraq. His initial strategy of narrowed expectations de-emphasized the search for a comprehensive ceasefire, instead seeking to facilitate limited truces across the country. De Mistura arranged and facilitated further talks in Geneva in spring 2015, which were organized as a set of "indirect, thematic discussions based on the main points of the Geneva Communique."[33] However, the lowered expectations and quiet diplomacy were overcome in 2015 by an out-break of violence and great power interventions, both of which set the stage for what followed.

## 2015: The Inrush of Armies

When Abu Bakr al-Baghdadi and the still-nascent ISI began send-ing jihadists westbound from Iraq and into the gaping seams of the Syrian Civil War in August 2011, the group took the name of Jabhat al-Nusra l'Ahl as-Sham and quickly established itself as an effective fighting force, often in cooperation or at least in parallel with the Free Syrian Army.[34] The leadership structure and penchant for violence of al-Nusra combined with the situation on the ground in Syria in 2013–2014 to allow for the explosion of ISIS onto the world stage. The Assad regime, however, should be remembered for its complicity. Indeed, in 2011, as the Syrian regime was focused on arresting and torturing peaceful protesters, the majority of what would soon be-come ISIS leadership were released from jail by Bashar al-Assad.[35] In addition to the decision to abandon border areas and posts in the eastern provinces of Deir Ezzor, Hasakeh, and Raqqa in early 2013, regime-affiliated businessmen willingly dealt with ISIS elements con-trolling numerous oil installations.[36] Furthermore, by early 2015, Syr-ian air strikes ahead of ISIS forces advancing on the rebel-held Aleppo garnered condemnation as direct cooperation and "aiding extremists against Syrian population" by the US embassy in Syria—now head-quartered in Washington.[37]

As the civil war continued into 2015, ISIS attacks proceeded further afield into Kuwait, Egypt, Turkey, and France. A 2014 RAND study

prediction that "terrorist attacks launched from jihadist strongholds in Syria could provoke military strikes against the jihadists" had been realized; in September the US announced the formation of the Global Coalition to Defeat ISIS.[38]

Furthermore, in what became a distinctly destabilizing influence on the country, Iranian-commanded forces grew in power and resources, pushing alarmingly close to the Israeli frontier. These Shi'a proxy forces were in fact directly inserted in early 2012 after a visit from General Qassem Suleimani, commander of the Islamic Revolutionary Guard Corps's (IRGC) elite Quds Force. Beyond the early IRGC presence, Lebanese Hezbollah and Iraqi Shi'a militias were also reportedly rushing to save the Assad regime by February 2012.[39] Lebanese Hezbollah, springing forth from a deeply troubled Syrian regime client state, feared having its arms supply routes cut off with the fall of its strategic partner.[40] For the Iranian mullahs and Iraqi Shia militias, the preservation of the supposed *Shia Crescent* axis of resistance was on the line. By December 2012, *the New York Times* was reporting on the clearly ramped-up Iranian deliveries of weapons, ammunition, and militia groups to Syria by air via Iraq.[41] The rapid rise of Sunni-dominated ISIS in 2014 only further accelerated the Iranian deployments.[42]

Israel considered these deployments and armaments so close to its northeastern border a vital threat to national security that warranted action. In early 2013, Israel began launching airstrikes on targets associated with these Iranian-commanded forces.[43] Despite choosing to abstain from overtly supporting the Syrian opposition, most likely due to the suspicion that a successor regime to Assad's was no guarantee of less Syrian hostility toward Israel or jihadi safe havens, the Israeli Air Force accelerated its own use of force against the Iranian presence.[44]

As the crisis deepened in 2015, Assad's position appeared increasingly unsteady—military defeat was certainly possible. Moderate opposition groups increasingly yielded to more extremist organizations and refugees flowed out in all directions—particularly into Turkey. ISIS controlled an incredibly large swath of territory from Mosul to Raqqa to Deir Ezzor, which compelled a rapidly growing coalition air campaign. Iranian forces deepened the sectarian fissures as they retook ISIS-held territory. In line with his 2012 diplomatic coup on chemical weapons, the time had arrived for President Putin to bolster his position as regime-savior. Suleimani seized the moment in a July 2015 trip to Moscow. According to Reuters, "Soleimani put the map

of Syria on the table. The Russians were very alarmed, and felt matters were in steep decline and that there were real dangers to the regime."[45]

Russian airstrikes began on 30 September, and naval forces and ground troops arrived shortly thereafter. The immediate aims of saving the Assad regime and its strategic basing in the country underpinned an evolving Russian strategy in the region of broadening its influence and military power, normalizing violations of international norms, and cementing Russian-oriented alliances.[46] As the Russian and Iranian interventions consolidated Assad's position, Special Envoy de Mistura lowered his expectations and his quiet diplomacy transitioned to a renewed political process based on the now-distant Geneva Communique. Russia eagerly sought to be seen as a legitimate international mediator, setting its sights on Vienna.

## A Moment of Unity

With the great power interventions reaching a fever pitch, US Air Force fighter squadrons arriving in Incirlik, Turkey, to contest the skies of northern Syria already brimming with Russian frontline units, and 130 people soon to be slain in downtown Paris at the hands of three coordinated teams of ISIS-inspired militants,[47] a new diplomatic push commenced in Vienna. During October and November 2015 meetings, a group of 20 states and international organizations called the International Syria Support Group (ISSG) met and set forth plans for an updated peace plan.[48] Iran sat down with Saudi Arabia, Russia with Turkey, and China with the United Kingdom. In an extraordinary development conducted between two major meetings in Vienna, the specter of ISIS and the incredible swiftness in which the world's militaries had rushed into a shattered Syria caused all 20 members to agree on the need for joint action. The Geneva Communique was reborn, and the language of the newly agreed peace plan headed directly to the UN Security Council in New York.

Despite years of recriminations, diplomatic efforts, and military saber-rattling, Secretary Kerry emerged from meetings in Moscow on 16 December 2015 declaring that "the United States and our partners are not seeking so-called regime change in Syria."[49] Regime change of behavior would be the new official line. Two days later, the road map for a peace process in Syria was unanimously settled upon by the

Security Council in the form of UNSCR 2254. Notable points in the resolution are included in summary, below (emphases added):

- Reaffirms the *territorial integrity* of the Syrian Arab Republic;

- Reiterating that the only sustainable solution to the current crisis in Syria is through *an inclusive and Syrian-led political process*;

- Urging the protection of rights for all Syrians and *humanitarian access* throughout the country;

- Bearing in mind the goal of *bringing together the broadest possible spectrum of the opposition*, chosen by Syrians, who will decide their negotiation representatives and define their negotiation positions so as to enable the political process to begin;

- Requesting January 2016 as the start of formal negotiations on a political transition process that establishes *credible, inclusive and nonsectarian governance, drafts a new constitution, and holds free and fair elections*, pursuant to the new constitution;

- Demands that all parties immediately cease any attacks against civilians;

- Underscores the critical need to build conditions for the *safe and voluntary return of refugees* and internally displaced persons;

- Expresses its support for a nationwide ceasefire while reiterating its call for eradicating designated terrorist group safe havens.[50]

The Geneva III round of talks were set to proceed at the beginning of 2016, yet February's meetings—the first peace talks in approximately two years—commenced in the shadow of a now four-months long Russian bombing campaign. Fractures within the opposition delegation and between specific Islamist representatives and their regime counterparts caused an immediate suspension of the meetings.[51] Determined not to lose perceived momentum on the heels of 2254's passage, the 20-member ISSG gathered in late February, resulting in a joint Russian and American statement and quick Security Council endorsement calling for an immediate nationwide ceasefire. A ceasefire task force was established, the regime and upward of 40 different rebel groups signed on to the agreement, and on 27 February, the fighting stopped across much of Syria.[52]

With the guns mostly quiet, the diplomatic push accelerated. Further Geneva talks in March produced a document agreed upon by the regime and opposition called the "Points of Commonalities."[53] Again

in Moscow and in a joint news conference with Foreign Minister Lavrov, Secretary Kerry announced on 24 March that a target schedule had been agreed upon for "establishing a framework for a political transition and also a draft constitution."[54] At the next meeting in Geneva in April, however, Assad and the Russian Ministry of Defense signaled their defiance of the diplomatic handshakes. Amid repeated Russian ceasefire violations, some of which involving airstrikes directly targeting the headquarters of a US-backed opposition group,[55] Assad pushed forward with parliamentary elections and a wholesale rejection of the notion of a transitional government.[56] By the completion of the April 2016 meetings, it was clear that the ceasefire in the northwest was dissolving and no central issues would be agreed upon.[57] The post-2254 momentum in the early part of 2016 was instead an illusion—Assad and his Russian and Iranian enablers still preferred the military solution.

Frustrated with the failed ceasefire and stalled momentum on the political process, the US State Department and Russian Ministry of Foreign Affairs announced an agreement in September 2016 on the intent to establish a Joint Implementation Center by which the militaries would share intelligence and coordinate airstrikes against ISIS and al-Qaeda.[58] In view of hopefully improving the military-to-military deconfliction protocols—an issue still growing in complexity after the November 2015 Turkish shoot down of a Russian Su-24 near the Syria-Turkey border—the agreement functionally served to buy the Russian military time to prepare for the upcoming assault on Aleppo; actual implementation never saw the light of day.[59] Indeed, the plans were publicly scrapped in early October as Russian and Syrian airstrikes hammered Aleppo and the American presidential election reached its culmination.

## "Astana-isation"

At the close of 2016, with the US consumed with a political change of power and the UN frustrated by the stalled Geneva process, Russia seized the diplomatic initiative by hosting senior delegations from Turkey and Iran in Moscow in December. This new mechanism became known as the Astana Process. The tri-nation group declared itself the new "guarantors" of a Russian-led process to seek agreement between the Syrian regime and its opposition.[60] Russia proposed a

nationwide ceasefire starting on 30 December before the Kazakh capital Astana played host to the first round of talks in late January 2017.[61] By attempting to "gain disproportionate influence within international efforts to implement UNSCR 2254," as the Institute for the Study of War's Cafarella and Zhou remarked, Russia used the process in its efforts to push Turkey further from the NATO fold.[62]

In the January talks, Russian diplomats boldly presented their homemade draft Syrian constitution. Then, between May and September 2017 meetings, Russia, Iran, and Turkey narrowed the ceasefire terms and instead agreed on the establishment of "de-escalation zones" in western Syria.[63] The "Astana-isation of Geneva," according to Syrian writer and journalist Hassan Hassan, was really just a "military solution disguised as a political one."[64] The opposition delegation refused to attend further talks, and Assad never actually signed any deal resulting from Astana. The introduction of a physical draft of a new constitution was a significant move, however, and indeed created a type of UNSCR 2254-esque momentum. Rex Tillerson, the new secretary of state, was eager for de Mistura and the UN to re-engage, to "move [Astana] over to Geneva."[65]

Throughout 2017, the new presidential administration's attention primarily focused on the physical defeat of the so-called caliphate. The US military and the Coalition to Defeat ISIS rapidly advanced Operation Inherent Resolve's objectives: from liberating West Mosul in late spring, the last major Iraqi city center under ISIS control, to cutting off militants fleeing west toward the Iraqi border towns, to the Syrian Democratic Forces (SDF)-led isolation and clearance campaign in Raqqa in early fall. With lines of deconfliction being continually updated between US and Russian interlocutors—sometimes before, and sometimes after significant air-to-air interactions between the rival air forces—the elimination of ISIS began to draw a new map across the eastern and southern Syrian landscape.

In January 2018, Russia, still eager to assert unilateral influence on the diplomatic front, invited 1,600 representatives from across Syrian society to a conference in Sochi coined the "Congress of Syrian National Dialogue." In hopes of reviving negotiations on a new constitution, the flashy Russian session intended to rival the renewed UN-mediated Geneva process.[66] The event was another miserable failure, as prominent leadership of the Syrian opposition boycotted the gathering. Most of the arriving opposition members refused to even depart the airport upon beholding the event logo, which was splashed all

over town and featured the Assad regime's flag.[67] Despite the failure, Russia continued to attempt showy, unilateral events aimed at propping up the regime's standing. A November 2020 Russian-initiated conference on the return of refugees to Syria, moreover, hurriedly organized despite the COVID-19 pandemic and hosted in Damascus, drew widespread criticism and international boycotts.[68] While reconstruction funding and legitimacy would be sure to follow mass returns of refugees and internally displaced persons, Russia's nonnegotiable policy of maintaining Assad's grip on power continues to freeze the diaspora in place and stymie other Russian diplomatic initiatives.

## Turkish Tripwire

Volumes will be written on the Turkish influence on the Syrian Civil War. Given the vast refugee flows to Turkey, the location of aid and armament transfer points, and controversial military incursions, the Turkish factor indeed represents a significant military, political, and diplomatic weight on the Syrian regime. Early in the conflict, and almost continually throughout, Turkey has played host to an incredibly large migration of refugees. Of the 5.6 million Syrian refugees living in neighboring countries by the spring of 2020, 3.6 million were estimated to be in Turkey, according to the UN High Commissioner for Refugees.[69] However, the issue went well beyond a mere humanitarian matter. In 2011, Assad reportedly released Kurdistan Workers Party (PKK) members from prisons and secured an arrangement by which its Syrian affiliate People's Protection Units (YPG) would administer large chunks of northeast Syria in exchange for continued access to its oil supplies.[70] As the Assad forces retrograded from the northeast, however, Turkey kept its focus more directly on the violence breaking out in Latakia, Daraa, and Aleppo. It provided direct and indirect support to various rebel military organizations and regarded the militants' identities, relative strengths, and armaments as vitally significant to its own security. Indeed, the initial headquarters of the Free Syrian Army was inside of Turkey, and foreign fighters and aid alike passed across the border with regularity in the conflict's early stages.[71]

After the explosion of violence so near its border, Turkey looked on with concern as US officials rejected its proposed Sunni force and instead organized, equipped, and deployed the YPG as its primary

fighting mechanism—shrewdly rebranding the mushrooming army as the Syrian Democratic Forces (SDF).[72] Despite its unqualified hammer and anvil-style success in eliminating the so-called caliphate alongside coalition airpower, an army so closely linked to the PKK—a terrorist organization according to Turkey, the US, and European Union—growing into a force of 100,000 fighters and the second largest army in all of Syria in the latter half of the decade proved unacceptable to President Recep Tayyip Erdoğan.[73] While State Department officials attempted to assuage Turkey's concerns by labeling the relationship as "temporary, transactional and tactical," a pragmatic and limited arrangement with those "ready to act,"[74] Erdoğan and his advisors nevertheless interpreted events on the ground quite differently.

The YPG crossed west of the Euphrates and further into Sunni Arab areas, taking Manbij from ISIS in August 2016, with their sights set on al-Bab and Afrin further west. Indeed, connecting the eastern and western cantons of traditionally Kurdish enclaves into a new "Rojava," or "Western Kurdistan," became an explicitly stated aim of the militant group.[75] This proved a tripwire for Turkey. From August 2016 to March 2017, Turkey's Euphrates Shield Operation moved against YPG forces in the vicinity of al-Bab, ostensibly to position the Free Syrian Army in the Afrin-Kobane gap after defeating ISIS,[76] but functionally fragmenting the Syrian Kurds and displaying "Erdoğan's express wish that the YPG remain east of the river," according to Brookings's Amanda Sloat.[77]

Along with the fall of Raqqa in late 2017 and subsequent US military attention on the Middle Euphrates River Valley as the last ISIS stronghold, American diplomats and the White House began to recognize the need to limit US support for the YPG, especially near the Turkish border. Less than six weeks after the White House expressed its intent "to stop supplying weapons to ethnic Kurdish fighters in Syria,"[78] Combined Joint Task Force-Operation Inherent Resolve announced plans to establish a 30,000 SDF-strong "Border Security Force" as "actions against ISIS draw to a close."[79] The Turks "were provoked," and "CENTCOM [United States Central Command] [was] out of control," the soon-to-be-named State Department Special Representative for Syria Engagement Ambassador James Jeffrey later remarked.[80] Within a week of the announcement in January 2018, Turkey's Operation Olive Branch moved against the YPG in the Afrin district northwest of Aleppo City to create a localized buffer zone on its border.[81]

For the next year and a half, State and Defense Department officials engaged continually with their Turkish counterparts to keep the military pressure and political focus on Assad, instead of the smoldering row between two NATO allies. The "Manbij road map" was established and pursued by the US and Turkey, seeking to define acceptable *safe zones in northern Syria*[82] and withdraw YPG and Democratic Union Party leadership from their presence in Manbij local councils and military leadership posts.[83] Then, on 14 December 2018, with Presidents Trump and Erdoğan speaking by phone, Trump surprised his closest advisors by acquiescing to Turkish ownership of the ground campaign against ISIS in the northeast.[84] Five days later, President Trump announced the defeat of ISIS over Twitter[85] and issued an order to the Pentagon to "move troops out of Syria as quickly as possible."[86] The order was ultimately reversed after Turkish representatives arrived in Washington to lay out a more detailed plan, which still involved significant US assistance, at the behest of European allies, among others, in the drive south to the Euphrates.[87] Turkish security concerns persisted, however, and often focused on the continued presence of Kurdish fortifications near the border.[88]

Notwithstanding US and Turkish diplomatic and military agreements in July and August 2019 on joint patrols along the M4 highway in northern Syria[89] and a joint operations center,[90] Turkey remained dissatisfied with its unfulfilled demand for a 30–40 kilometer safe zone along its border.[91] The subsequent Turkish Operation Peace Spring unfolded in October along a sweeping area from Tal Abyad to Ras al-Ain and further south to the M4 highway.[92] A 17 October ceasefire agreement mostly froze the Turkish forces to a 130-kilometer-wide by 30-kilometer-deep zone inside of Syria. Five days later and on the heels of a meeting between Erdoğan and Putin, Turkish Foreign Minister Mevlut Cavusoglu announced a joint Turkish-Russian deal to "remove YPG elements and their weapons to a depth of 30km from the Turkish-Syrian border" and establish joint patrols.[93] In subsequent remarks to the House Foreign Affairs Committee, Ambassador Jeffrey labeled Peace Spring a "tragedy . . . [and a failure of] longstanding US government policy in two administrations to keep that from happening."[94]

While Syria's northwestern region grew less and less influenced by the US, Moscow and Ankara further negotiated an eventual 5 March 2020 ceasefire in the Idlib province after Turkish-backed forces delivered heavy losses to Syrian regime forces.[95] Nearly two years on since the

Turkish incursion, and despite the NATO-jarring images of joint Turkish and Russian convoys along the M4 highway, US policy in pursuit of UNSCR 2254 caused it to embrace the 17 October and 5 March ceasefires without qualification as the best path toward a nation-wide and possibly permanent settlement.[96]

## 2254's Garnish: A New Constitution

On the political side, and in view of bringing together a broad spectrum of the opposition and visually, measurably moving the UN-SCR 2254 process along on the heels of 2016 Geneva efforts and 2017–2018 Astana and Sochi talks, the September 2019 formation of the Syrian Constitutional Committee raised hopes among opposition parties for a negotiated settlement. The initiation was incredibly slow, however, and the progress since, halting. After participating in the January 2018 Sochi conference, Special Envoy de Mistura took on the mandate of convening such a body under the Geneva umbrella.[97] It would have 100 members mostly selected by the Astana guarantors, 50 of which represent the Syrian government and 50 from the opposition, but also an additional list of 50 from civil society—appointed by the UN Special Envoy himself.[98] By November 2018, however, recriminations over the lists of committee members persisted, especially over the civil society group, revealing the serious cracks in the UN leadership of the Russia, Iran, Turkey Astana initiative. In his briefing to the Security Council just before his resignation at the end of 2018, de Mistura regretted that "we have not yet . . . [reached agreement]; the parties really [did not] recognize each other as interlocutors with whom they must do business and actually negotiate, let alone reach agreements."[99]

Despite the shadow of Assad making efforts to manipulate the Syrian Constitutional Committee's composition,[100] it finally launched in Geneva in October 2019 under the watchful gaze of new UN Special Envoy Geir Pedersen and 150 formal participants.[101] The sight of the first formal talks between the various Syrian parties since 2014's Geneva II represented "a sign of hope for the Syrian people," Pedersen remarked, yet the talks stalled as a small group of 45 delegates (15 from each group) failed to even agree on an agenda. The regime side apparently insisted on leading off with a discussion on "basic patriotic principles," which the opposition labeled a clear "stall tactic."[102] A second

meeting of the UN-facilitated committee's small group was reconvened in August 2020. Amid international pressure and a still-holding 5 March ceasefire agreement, initially polite interactions and hopes for at least two weeks of talks yielded to an early departure of the regime delegation insisting on conversations about "national fundamentals" first, before even reviewing constitutional matters. Four additional sessions between 2021 and 2022 have similarly yielded no tangible results. Assad, for one, refers to the Geneva talks as "a political game."[103]

## Critical Variables to Follow

Nearly ten years on from the outbreak of the civil war, the meandering and fractured political and diplomatic track bifurcated by the unique 2015 moment which brought about UNSCR 2254 again stands at an inflection point. Numerous critical strategic variables remain in the balance—ones that will undeniably have an enduring effect on the future of Syria, its diaspora, and the greater region. These are:

### Competing Strategies

The US has settled into a strategic approach which aims to satisfy three main ends: "the enduring defeat of ISIS . . . the withdrawal of all Iranian-commanded forces from the entirety of Syria, and an irreversible political process."[104] Furthermore, the policy makers envision a future in which Syria is defined by "no threat to the neighbors, no threat to the population, no use of chemical weapons, no support for terrorism, no mass slaughter of one's own civilians, and accountability for war crimes."[105] The US brushed with military confrontation, then sheathed the sword in recent years amid a common and clear enemy found in ISIS. Instead, the diplomatic and economic instruments are employed to isolate and coerce. The Syrian regime, however, aided and abetted by its Russian and Iranian partners, aims for legitimacy. It pushes for diplomatic recognition, economic relief through reconstruction funding closely tied to the returns of refugees, and military victories especially in its still-lawless south and increasingly Gaza Strip-like northwest.[106] These two competing strategies stand in utter contrast and show little signs of movement.

### Civil Stabilization

Assad points to the US military withdrawal from Iraq a decade ago at the hands of a "popular resistance" as the example for what he sees eventually happening in coalition and Turkish controlled areas of the east and north, respectively.[107] If the US Agency of International Development, UN, and a multitude of additional government donors and nongovernmental organizations can instead keep enough border crossings open, keep essential services turned on, and keep economic opportunities improving outside of regime-controlled areas, then the "resistance" may never stand to gain a foothold. Regime aligned forces, therefore, should be expected to work overtly and covertly to undermine all aspects of civil stabilization efforts.

### The Arab States

Against the backdrop of generational struggles defined by Iranian versus Saudi spheres of influence, militant and political Islam, and economic frailties caused by little to no diversification, the political will of the Arab League and its member states to continue such an isolating campaign against one of its former members is a critical variable. The October 2020 Omani move in becoming the first Gulf Arab state to reinstate its ambassador to Syria appeared to signify a changing tune.[108] It has been followed by talks of a reopened Saudi embassy in Damascus, the UAE actually doing so, and hosting an official visit by Assad, and eventual Arab League readmission in May 2023. Further US retrenchment from the region, paired with the specter of a more assertive and aggressive Turkey, would likely lower the barriers to normalization even further.

### The Effect of Sanctions

Despite having sanctioned the Hafez then Bashar al-Assad-led country since the 1970s, three additional sanctions layers levied since aim to increasingly coerce through economic measures. The recent, additional Syria sanctions authorities were granted to the State and Treasury Departments through the late 2019 passage of the Caesar Syria Civilian Protection Act.[109] Five tranches of Caesar sanctions—targeting the Assad regime and its financial enablers—had then been imposed by the conclusion of the Trump administration.[110] How effectively these exertions overcome opposition and countermeasures

to cause real and targeted hardship on the desired parties, while avoiding kneecapping stabilization efforts in areas outside of regime control, remains to be seen. The Biden administration's apparent disinterest in further tranches of Ceasar Act sanctions indicates diminishing interest in continuing the economic pressure.

### Refugees and Repatriation

Half the Syrian population is reported to have fled their homes, joining the ranks of the internally displaced persons (IDP) or international refugees.[111] The pressure that this population places on Turkey, Lebanon, Jordan, and the European Union specifically is significant. Furthermore, IDPs and prisoners at al-Hol and other camps across the east and north of Syria await their eventual transfer amid conditions described as "appallingly overcrowded and unsanitary."[112] Despite this, most governments maintain a staunch unwillingness to repatriate their own citizens, especially those who arrived to join the Islamic State. How long the refugee hosts choose to maintain the status quo, and how long IDPs should be expected to persist in squalor before the problem of radicalization becomes "exponentially worse a few years down the road," according to Central Command's Gen Frank McKenzie,[113] are incredibly consequential questions.

### US Military Presence

The legal justification for the presence of the US military forces in Syria relies on 2001 and 2002 authorizations for use of military force against "al-Qaeda, the Taliban, and associated forces and against ISIS." Limited strikes against the regime in response to chemical weapons attacks were done according to presential authorities under Article II of the Constitution, according to the DOD.[114] Given the assertions of the physical caliphate's "elimination"[115] but continued military operations east of the Euphrates river, in the Badiya Desert, and Idlib,[116] continued congressional and executive acceptance of these legal justifications for military presence in eastern Syria is indeed a variable to watch, as is the baseline political will to sustain such presence.

### Iranian Activity

Whether embodied by the Revolutionary Guard Corps, Quds Force, Lebanese Hezbollah, or Kata'ib Hezbollah, the persistent presence of militant Shia groups directed by Iran continues to escalate

tensions with Israel and destabilize the civil societies within which they are stationed. Although Assad claims that the "Iranian pretext" behind American involvement is merely a "cover up [for] their true intentions," a previously arranged withdrawal of Iraniancommanded forces at least 85 kilometers away from the Israeli border[117] has nevertheless failed to meaningfully materialize.[118] Further Syrian government and societal tolerance of such militant groups, along with the security of their sources of funding and logistical access points to the country, remain significant strategic variables.

### Syrian Elections' Legitimacy

"Free and fair elections, pursuant to a new constitution" is indeed a remote end goal for UNSCR 2254 given the country recently passed its fiftieth year under single-family al-Assad rule.[119] Every election held in the interim, however, without significant international monitoring mechanisms or franchise for the Syrian diaspora, further undermines the realities of both a meaningful opposition and a UN-facilitated political process. Widespread concern over the 2021 presidential elections—in which Assad supposedly garnered over 95 percent of the vote—and the expected term of office extending to 2028, have shaken the very core of 2254.[120]

### Unity Within the Assad Circle

Through every momentum shift, American secretary of state appointment, international conference, and foreign military intervention, Bashar al-Assad's firm grip on power and wielding of the levers of state control have been distinctly ruthless and calculating. However, amid the rubble and continued economic crisis, the inner circle has shown signs of cracking. May 2020's public rebuke of Assad's "inhumane" state security forces by none other than Rami Makhlouf, a longtime family friend, fellow Alawite, and Syrian business tycoon, may have been an indicator of fatigue setting in among those nearest the Presidential Palace. Economic stressors, including a desperation for cash, appear to be main contributors.[121]

## Conclusion

At the time of writing this chapter, the US military footprint in Iraq had been reduced to 2,500 troops, yet the numbers in Syria have

stabilized, and those that remain continue to operate with broad bi-partisan consensus.[122] In order for the military observer or partici-pant to properly understand the military's role in the Syria campaign, Operation Inherent Resolve must be seen as a war within a war: a limited campaign—from the western perspective—against a declared hostile force amid a total war of a regime desperate to remain in power against anything standing in the way. The limited campaign is in the hands of the military; the diplomats have the lead on strategy amid the total war. Understanding the political-diplomatic history and present strategy driving the larger struggle is crucial, then, for both civil and military leadership. That meandering and fractured process should be viewed through the lens of pre- versus post-December 2015 and UNSCR 2254—what led to a singular moment of unity between world powers, and what has impeded its implemen-tation since. If the military perceives stalemate and waning influence, it may simply misunderstand who has the lead, and what levers are being employed.

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Chapter 4

# Inherent Friction

## The United States, Turkey, Israel, and the Syrian Civil War

*Christopher Hemmer*

*[O]ur allies in the region were our largest problem in Syria.*

—Joe Biden

In responding to a question about US policy in Syria, then Vice President Biden caused a brief diplomatic stir when he pointed to American allies, "The Turks, . . . the Saudis, the Emiratis, etc." as being so determined to unseat the Assad regime in Syria that they ended up arming and funding terrorist groups like the Islamic State in Iraq and the Levant (ISIL).[1] Biden quickly sought to mend the rift by denying "any implication that Turkey or other Allies and partners in the region had intentionally supplied or facilitated the growth of ISIL."[2] His comments temporarily eased, but did not erase, the friction that existed between the United States and its allies as they confronted the Syrian Civil War and the rise of ISIL.

Even though the US and its partners had largely overlapping interests and shared goals in Syria, some level of allied friction was inevitable. This friction stemmed mostly from the competing tradeoffs among those shared interests that America and its allies were facing in the complicated Syrian maelstrom. This chapter examines two allied relationships in particular—with Turkey and with Israel. The first case is one of great friction—going so far as to risk armed conflict between US and Turkish forces in Syria. The latter case, by contrast, experienced much less friction, as Israel was probably not included in the "etc." in Vice President Biden's above comments. The reason for this relative lack of friction in the second case partly stemmed from greater overlap in national priorities, but even where conflicting goals existed, Israel's relatively limited interests and activity in the Syrian Civil War kept friction with the US to a minimum.

The stronger the interests that drive the United States or its allies to get involved in any joint endeavor, the more friction is to be expected. Barring the unlikely case of absolute agreement on interests, prioritization of those interests, and on the means to pursue those interests,

friction is inherent to any alliance. These twin case studies demonstrate a direct relationship between intra-alliance friction and the potential resources an ally commits. Allies with intense interests in a particular issue are likely to be willing to bring substantial resources to bear on that issue. The more they see their interests at risk and the more they are willing to do, however, the more likely it is for friction to develop between their actions and those of the United States. The opposite is also the case. The less a state sees its interests at stake and consequently the less it is willing to contribute, the less likely it is for friction to develop between its actions and the United States. This was the case with both Turkey's deep involvement and Israel's comparatively limited involvement in the Syrian Civil War.

## US Interests in the Middle East and Policy Toward Syria

While there are a number of ways to characterize US interests in the Middle East, I find the following three-pronged list most useful. First is energy. The world economy as well as the economy of the United States is dependent on the reliable flow of oil and natural gas onto global markets. The Middle East and the Gulf region in particular still possess a significant portion of the world's petroleum reserves, even given recent US successes in fracking and exploiting "tight" oil reserves. Even though the United States imports only a small and decreasing amount of its oil from the Middle East, the region still retains much of its importance for the United States as the oil market and the price of oil are set on global markets (this is less the case with natural gas). Where a state gets its oil is less important than the overall state of the global market. If Gulf petroleum reserves were cut off from that global market, everyone's energy prices would go up as competitors vied for the remaining alternative supplies. The US's increased production would help any potential balance of payments issues, but the negative economic problems that flow from an increased price for fuel would hit the US and the global economy alike. Only an unprecedented breakthrough in alternative energy technologies would change that picture. Some analysts might also include protecting sea-lines of communication as a core US interest in the Middle East. That, however, is subsidiary to America's energy interest. If the

major export of the Gulf were not critical to the world economy, the United States could afford to care a lot less about the Strait of Hormuz.

A second core US interest in the Middle East is protecting American lives threatened by international terrorism. The terrorists who carried out the attacks of September 11, 2001, came from the Middle East and pointed to US policies in the region as a source of their grievances. While the war on terror was not limited to the Middle East, the Middle East has been and remains the central front in that war.

Third, the United States would also like to see the spread of its ideals like, democracy, human rights, and economic liberalization in the Middle East, as in other regions. While tempting to dismiss as hollow rhetoric or empty propaganda, it is difficult to account fully for US foreign policy without taking America's ideological commitments into account.

What makes formulating and executing US foreign policy in the Middle East so difficult is that these three interests are often incompatible. While one could theoretically argue that in the long term all go hand-in-hand, as John Maynard Keynes usefully reminds, also in the long term we are all dead. The United States has to operate in the short to medium term—and in the short and medium term, these interests often compete rather than cohere. What the United States does to advance one can and often does undermine another. The nuclear deal with Iran may have calmed world energy markets and kept the regime in Tehran away from acquiring the deadliest of weapons, but it also increased the resources the regime had access to, which could be used to support terrorist groups and strengthen an ideologically competitive regime. Actions taken against terrorist threats could undermine the allies in the region the US relies on to get Gulf energy reserves to markets or could be seen as incompatible with US values. Similarly, would increased popular participation in government undermine the allies the United States cooperates with on antiterrorism measures or in maintaining the flow of oil onto world markets?

The most common criticism of US foreign policy in the Middle East is that it is inconsistent, hypocritical, and full of double standards. The reason such criticisms are prevalent is that US policy in the region is often inconsistent, hypocritical, and full of double standards. The underlying reason for these contradictions is not that there is some grand but unspoken conspiracy behind American foreign policy, as some regional actors fear, or that any administration has failed to think its policies through, which is the popular partisan

criticism in the United States, but because the interests the United States seeks to further are often incompatible. Balancing competing interests does not lend itself to consistency, as the United States has to constantly calculate and recalculate the overall plusses and minuses of any individual policy across a contradictory set of interests.

The same holds for our allies. While many in the region express frustrations with US hypocrisy, inconsistency, and double standards, they are often similarly guilty, for the same reason: balancing their own contradictory interests. The Saudis and Emiratis, for example, were happy to applaud popular movements challenging certain governments in the region, like Qaddafi in Libya, but the domestic challenge to the monarchy in Bahrain was seen in quite a different light. Mutual recriminations about hypocrisy might be emotionally satisfying, but they ignore the difficulty every state faces in adjudicating between contradictory interests in a complicated region. With the US and its allies all being forced to make tradeoffs between incompatible interests, it is not surprising that even allies who share a similar set of interests could still disagree over how these tradeoffs should be made in any particular case.

In the context of its regional concerns, Washington finds itself with limited interests in Syria and the civil war there. Syria is not a large energy exporter, and despite its central geographic position in the region, Syrian territory is not central to the trade routes that get the region's petroleum resources onto world markets. For America's energy interests in the Middle East, Syria is decidedly peripheral. Washington's concerns about limiting the terrorist threat gives the United States a primarily negative goal in the Syrian Civil War. As long as whatever government emerges in Syria is not supportive of, or creating safe havens for, terrorists targeting the United States, it matters little to Washington who rules Damascus. The humanitarian crisis the fighting has created and the authoritarian nature of the Assad regime both implicate American values, but neither require active American involvement in the civil war. The former calls for aid over involvement, and for the latter, the United States has been living with the nondemocratic Assad regime for decades. While the United States has an interest in limiting the risk of the fighting in Syria spilling beyond its borders, this pushes the US to containing the Syrian Civil War rather than active involvement.

Even these limited goals, however, could be contradictory. Iran and Russia, who are critical players in global energy markets, are both

strong supporters of the nondemocratic Assad regime, and their involvement has increased rather than decreased the humanitarian suffering. More pointedly, as the opposition to the Assad regime became dominated by terrorist groups like ISIL, the less attractive regime change in Damascus became. Had there been an opposition to Assad that could have relatively quickly won the civil war, ended the humanitarian crisis, and ushered in a movement that would fight terrorism, limit the influence of Iran and Russia, and improve relations with Israel, that would have been ideal from Washington's perspective. The reality of Syria was quite different, and in that reality, the United States had both limited and conflicting interests. Combined with fatigue from long campaigns in Iraq and Afghanistan and disappointment over the results of regime change in Libya, US policy makers approached Syria with deep ambivalence. There was no desire to get deeply involved, and even the limited participation the United States was willing to accept was marked more by the hedging of competing interests than by decisiveness. This ambivalence set the stage for friction between the US and one of its key allies—Turkey.

## Turkey and the Syrian Civil War

Ankara's interests in Syria were far deeper than Washington's. The Syrian Civil War affected Turkey's competition with both Russia and Iran, along with influencing Turkey's relations with the European Union (EU). Violent attacks against civilians in Turkey also gave Ankara an interest similar to that of the United States in limiting the spread of terrorist organizations. Perhaps most seriously, the civil war in Syria risked exacerbating Turkey's fraught relations with their own Kurdish citizens. Economically, while Turkey had been attempting to increase trade with Syria before the civil war, more important was Turkey's reliance on Iranian and Russian energy imports, which could be at risk if violence in and over Syria escalated. Turkey also had to deal with the costs of hosting large numbers of Syrian refugees. The refugee crisis also gave Turkey a humanitarian interest in ending the fighting in Syria, as did Ankara's concern for the fate of the Turkmen in Syria. Moreover, the fighting in neighboring Syria, the potential for spillover on the terrorist and Kurdish fronts, and the refugee crisis all made Ankara's policy toward Syria a key issue in domestic Turkish politics.[3]

While deeper than Washington's, Ankara's interests in Syria were similarly conflicted. A quick replacement of Assad with a coalition regime where Sunni actors ideologically similar to Prime Minister (and later President) Recep Tayyip Erdoğan played a key role could have accomplished several things: established Turkey as a key regional player (thus increasing its value as an ally to both the Europeans and the United States); limited refugee flows; contained both the terrorist threat and the potential for spillover to Turkey's Kurdish region; weakened both Iran and Russia's influence in Damascus without risking a break in relations; led to the quick re-establishment of normal cross-border trade; eased concerns about the fate of Turkmen in Syria; and would have been a large domestic win for Erdoğan and his Justice and Development Party (referred to hereafter by its Turkish initialism AKP). The reality in Syria, however, was again quite different. As the war escalated, the tensions inherent in these interests came increasingly to the fore. With the Assad regime damaged but not defeated, the refugees continued to flow, creating a vacuum in northern Syria that Syrian Kurds quickly filled. Differences over policy toward Syrian refugees split Turkey further from the EU. The more the war dragged on, the more dependent the Assad regime became on the Iranians and the Russians, and the more Turkey risked confrontation with both. Stalemate risked making Turkey and Erdoğan look more feckless than effective. Even though Turkey's interests in Syria significantly overlapped with the United States's (against the Assad regime, Russia, Iran, and the empowering of terrorist groups and for limiting humanitarian suffering and keeping regional energy flows intact), differences in how each managed the tradeoffs among their competing interests led to significant friction between these two allies.

During the Cold War, relations between Syria and Turkey were frosty, with Turkey fully ensconced in the North Atlantic Treaty Organization (NATO) and Syria a close Soviet ally. Also troubling relations was a border dispute over the ownership of the Hatay Province, fear in Syria that Turkey could limit water flow into Syria, and Damascus's attempt to gain leverage over Ankara by supporting Kurdish groups in Turkey seeking greater autonomy and independence, such as the Kurdistan Workers Party, better known by its Turkish initialism PKK. As one Turkish foreign policy maker characterized the relationship, Syria "may claim that they need additional water to wash the blood of terrorism from their hands."[4] Threatening war with

Damascus, in 1998 Ankara was able to secure an agreement whereby the Assad regime pledged to cut its support of the PKK, which opened the door to better Turkish-Syrian relations.

Erdoğan's rise to power along with the AKP sped up these reconciliation efforts as Turkey put greater efforts into improving relations in the Middle East as part of Foreign Minister and later Prime Minister Ahmet Davutoğlu's "zero-problems with neighbors" policy. Using the metaphor of the bow and arrow, Davutoğlu reasoned that the more Turkey pulled itself back into the Middle East, the greater its influence could be extended outside the region—like an archer pulling back harder on the bow to allow the arrow to fly farther. By mending fences in the Middle East, Turkey would be a more sought after ally for the United States and the EU as well as maximizing its leverage against Russia and Iran.[5] Better relations with Syria could also improve the economic situation in Turkey's struggling southeast.[6] In 2008 Davutoğlu pointed to improved Turkish-Syrian relations as "a model of progress for the rest of the region,"[7] and analysts were studying how Turkish-Syrian relations had become "desecuritized."[8]

Turkey's evolving relations with Syria were just one facet of Ankara's efforts to find its place in a post-Cold War world. Ankara feared that the end of the Cold War meant that Turkey was less important for both NATO and the United States, a fear compounded by American actions in both the 1990–91 Gulf War and the 2003 invasion of Iraq that seemed to minimize Turkey's security concerns, particularly regarding how American actions could complicate Ankara's relations with its Kurdish population.[9] Turkey's growing economy, especially in the early 2000's, also encouraged Turkey's ambitions. As Soner Cagaptay summarized Turkey's aims under Erdoğan, "His goal is to make Turkey great as *stand-alone power. First in the Middle East and then globally.*"[10] This did not require abandoning Turkey's traditional ties to the West (through NATO and potential membership in the EU), but it did encourage Turkey to diversify its ties beyond the West to increase its "strategic autonomy."[11] To give a sense of the magnitude of the change and the challenges that this quest for strategic autonomy through a greater focus on the Middle East entailed, in 1990 Turkey's Ministry of Foreign Affairs had only 10 Arabic speakers—a number that grew to only 26 by 2011.[12] Making Turkey a "stand-alone" power entailed constant balancing as Ankara depends "on the United States and NATO for defense cooperation, European countries for trade and investment, and Russia and Iran for energy imports."[13]

The Arab Spring (or Uprising or Upheaval) presented Turkey with an opportunity to increase its influence in the Middle East. As a prospering state being run by a party that seemingly had successfully combined both a commitment to Islam and democracy, Turkey could be seen as a potential role model for states looking to replace aging autocrats with more democratic governments while incorporating Islamic political parties and individuals into the system.[14] Seeing Erdoğan's Turkey as representing a "moderate Islam," both the Bush and the Obama administrations were happy to see Turkey taking on role-model status.[15] Having few interests in Tunisia and strained relations with the Mubarak regime in Egypt, Ankara found it easy to side with calls for regime change in both. When those regimes fell, Turkey initially seemed well positioned to benefit. When the Arab Spring came to Libya, Ankara was more conflicted—having much greater economic investments and close to 30,000 Turkish workers living there. As a result, Ankara was far more hesitant to support regime change there, but eventually joined the chorus of states calling for Qaddafi's ouster.[16]

Syria would be Turkey's most difficult test. Having invested so much in recent years in improving relations with Damascus, Ankara was initially hopeful that reform rather than revolution could resolve the domestic crisis in Syria. It was only after the Assad regime rejected Turkish advice and violently confronted the protesters that Ankara changed course and started calling for Assad's ouster.[17] In its broad outlines, Turkey's handling of its relations with Syria tracked US desires. The United States had encouraged Turkey's rapprochement with Syria in the early 2000s, seeing it as a potential way of lessening Syria's dependence on Iran.[18] When later calling for Assad to step down because of his violent response to protests, that also put Erdoğan in line with the United States, as President Obama was making a similar call.[19]

Broad agreement on the desirability of Assad's political departure, however, still left a lot of room for disagreement. As Assad hung tenaciously to power, Turkey's desire for more decisive action to the spiraling crisis on its doorstep clashed with the Obama administration's desire to limit American involvement in a conflict that was peripheral to the United States. Thus, the first major point of friction between the United States and Turkey arose over how important the shared goal of seeking Assad's ouster was. To increase the military pressure on Assad, Erdoğan called for a no-fly zone in northern Syria and a

vast increase in military support for the rebels to prepare the way for an eventual advance on Damascus. Not wanting to commit the United States to another potentially prolonged military campaign in the Middle East, the Obama administration rejected those calls.[20] The administration's later decision not to use military force to enforce its "red-line" against the regime's use of chemical weapons, preferring a diplomatic agreement brokered by the Russians instead, again evidenced its ardent desire, contrary to Ankara's wishes, to limit its military involvement in Syria.

Ankara's disappointment with Washington's diffidence in Syria was not the only point of friction in US-Turkish relations stemming from the Arab Spring. The allies were similarly divided over Egypt, where Ankara's tense relations with the Mubarak regime and embrace of the newly elected Muslim Brotherhood-led government clashed with Washington's deep ties to Cairo and its later acceptance of the military coup that led to the ouster of the short-lived Morsi presidency. That friction increased when Erdoğan accused the Israelis of being behind the coup. As Arab Spring-like protests threatened to spread to Turkey in the Gezi Park protests, Obama and Erdoğan also found themselves on opposite sides, as the US administration criticized what it saw as Ankara's heavy-handed response.[21]

With the US desire to limit its involvement in Syria clear, Erdoğan looked for other allies that could help oust the Assad regime, setting the stage for the next round of friction, even as both allies agreed on the desirability of bringing Bashar Assad's time in power to an end. In finding potential allies, Turkey was willing to work with groups that the US was not comfortable with. Washington feared that while many of these fighters might be targeting the Assad regime today, in the future any weapons or training supplied to them could be turned against the West, as the United States had found to its dismay from its efforts to arm the anti-Soviet mujahedin in Afghanistan in earlier decades. Arming the potential terrorists of tomorrow to oust the Assad regime today was a bad tradeoff as far as the United States was concerned. Turkey saw the tradeoff leaning in the opposite direction. The continuation of the civil war was the overwhelming immediate threat—any potential blowback from potential terrorist groups could be dealt with later.[22] Washington was not alone in its worries about the actors Turkey was arming. Echoing his earlier concerns about the growing power of a "Shia-crescent" in the aftermath of the toppling of the Saddam Hussein regime in Iraq, King Abdullah II of Jordan now

warned of a growing "Muslim Brotherhood-crescent" anchored by Turkey and Qatar.[23] This division plagued the anti-Assad coalition throughout the war—which rebel groups were deserving of outside support and which ones were not? This split was the core of Vice President Biden's complaint about our allies in Syria that opened this chapter.

The increasing power of ISIL eventually increased America's concern with the ongoing civil war in Syria. While the Obama administration was unwilling to use direct American force to oust Assad, the threat of a terrorist organization taking over large swathes of Syria and Iraq was a far more ominous threat for the United States. It was the threat from ISIL that spurred the United States to assemble an international coalition to fight in Syria, and US Central Command announced the stand up of Operation Inherent Resolve to coordinate allied efforts against ISIL in Syria and Iraq. While ISIL's advance brought the US and Turkey closer in their assessment of how important the civil war in Syria was, it worsened rather than eased the friction between them. While Ankara and Washington could agree on the desirability of both ousting Assad and defeating the Islamic State, they disagreed over which of those goals should take precedence and continued to disagree over which actors in Syria were acceptable allies. For the United States, the anti-ISIL fight should take precedence and the Syrian Kurds were potentially valuable allies in the fight. For Turkey, the anti-Assad fight should take precedence and the Syrian Kurds were the central threat in Syria—not potential allies. America's support for the Syrian Kurds and Turkey's hostility toward them led to the most serious allied friction of the war.

The friction between the United States and Turkey over the Syrian Civil War is not the first time the Kurdish issue has complicated ties between Ankara and Washington. Since its founding, the Republic of Turkey has faced periodic calls for greater independence and autonomy from its citizens of Kurdish descent. Rebellions and repression have ebbed and flowed, with the 1984–99 Kurdish insurgency led by the PKK the most protracted and deadliest of those conflicts—with over 40,000 dead. Both the 1990–91 Gulf War and the 2003 toppling of Saddam Hussein spurred fears in Ankara regarding how America's actions could worsen the problems Turkey was facing on the Kurdish front.[24] What makes the situation in Syria even more difficult, however, is that the leading political party among the Syrian Kurds, the PYD (the Kurdish initialism for the Democratic Union Party), is a

direct offshoot of the PKK. As a result, Turkey sees it and its armed wing, the YPG (a Kurdish initialism for the People's Protection Units), as implicated in the terrorism of the PKK and as having political goals that go beyond Syria and include the Kurds in Turkey as well.[25]

Under the AKP, Ankara experimented with both reforms and military pressure to deal with the Kurdish issue. The fighting in Syria vastly complicated any potential political openings between Ankara and its Kurdish citizens by both empowering and threatening the Syrian Kurds. Facing a nationwide revolt in the middle of 2012, Assad largely pulled his forces out of the heavily Kurdish areas of Syria, allowing the PYD to establish de facto control and autonomy over large areas of Syria adjoining Turkey's southeastern border. Moreover, with Erdoğan openly calling for Assad's ouster, the Syrian regime felt free to reinvigorate its support for the PKK.[26] In the turbulence of the Syrian Civil War, the PYD soon found itself imperiled by the rise of ISIL. In the fall of 2014, ISIL launched a major offensive in Syria, symbolized most dramatically in its siege of the city of Kobane. The fighting between ISIL and the Syrian Kurds exposed the deep divide between the United States and Ankara regarding priorities and who was an acceptable ally in Syria.

For Turkey, the PYD, with its ties to the PKK, represented the gravest threat to Turkish security in Syria. The threat from ISIL paled in comparison. From that vantage point, Ankara thought temporary implicit and even explicit support for ISIL was a better option than risking the strengthening of a PKK-dominated Kurdish entity on its southeastern border.[27] The United States viewed the tradeoffs differently. The Kurds represented no threat to Washington and indeed had proven to be perhaps America's closest allies in Iraq. ISIL, in contrast, represented the exact type of group the war on terror had been directed against. With the initial failures of America's earlier train and equip program in Syria, where about a year into that $500 million program only about "four or five" trained fighters remained in Syria, the Kurds looked to be America's best shot at supporting a reliable ground force in Syria.[28] As the Kurds and ISIL clashed in Syria, the United States and Turkey clashed over how to respond. Turkey only slowly and reluctantly opened its territory for offensive action against ISIL and was supporting or looking the other way as ISIL utilized the porous Turkish border to strengthen its forces. Washington, in contrast, was eagerly bolstering Kurdish forces. The result was two

long-standing NATO allies each accusing the other of supporting terrorism in Syria.

The split only deepened as the fighting in Syria further affected Turkish domestic politics. Seeing Ankara favor ISIL over their ethnic kin in Syria pushed many Turkish Kurds further from the AKP. In the June 2015 Turkish election, the pro-Kurdish People's Democratic Party (known by its Turkish initialism HDP) performed well enough to deny the AKP an absolute majority in the Turkish Parliament for the first time since 2002. Unable or unwilling to work in a coalition, Erdoğan preferred to call for new elections in November of 2015. Those elections coincided with greater emphasis on the use of force against the PKK in Turkey, with many suspecting that this was done to bolster Erdoğan's nationalist credentials and inflict costs on the Kurds for their support of the HDP. If that was the plan, it worked, and the November 2015 election returned the AKP to a comfortable majority.[29]

Subsequently, Turkey launched a series of military operations into Syria more aimed at weakening the Kurdish forces there than unseating Assad or battling ISIL, although both latter goals were still part of Turkey's defense of their moves. In Operation Euphrates Shield, launched in the summer of 2016, Turkey intervened to prevent the Kurds from territorially linking two different Kurdish controlled areas and creating a contiguous Kurdish political entity across Turkey's southeastern border. Angered at US efforts to support a Kurdish dominated border force in Syria, Erdoğan argued that "a country we call an ally is insisting on forming a terror army on our borders" and that "our Mission is to strangle it before it's even born."[30] He followed up that threat with Operation Olive Branch to push the Kurdish forces out of their westerly positions in Syria (around Afrin)—with the aim of eventually pushing all Kurdish forces to the east of the Euphrates River. In 2019, Turkey launched Operation Peace Spring to seize a buffer zone on the border farther to the east. Each of these operations not only pitted Turkey against US supported forces in Syria, but they also risked direct combat between Turkish forces and the small number of US forces on the ground supporting the Kurds.

After declaring victory against ISIL in Syria, the Trump administration was open to accommodating Turkey's security interests and on 6 October 2019 agreed to reduce the risk of a conflict between US forces and Turkey by pulling the US military presence from areas Turkey was planning to seize.[31] This limited accommodation was, however, not enough to heal the rift. Facing accusations at home of

betraying Kurdish allies and pushing them to ally with the Assad regime and as a hedge against the reconstitution of ISIL in Syria, the United States was reluctant to fully pull its forces out and give Turkey a free hand against the Kurds. Just three days after agreeing to withdraw US forces from regions likely to be in the planned Turkish offensive, President Trump wrote a letter to President Erdoğan imploring him, "Don't be a tough guy. Don't be a fool!" and threatening that if Turkey went too far, the United States could take action that could be "responsible for destroying the Turkish economy."[32] As a measure of how deep the divide between Turkey and the United States became in Syria—when Russia first intervened to prop up the Assad regime, Turkey was disappointed by what it saw as weak US support for Ankara in the crisis that ensued in November of 2015 after the Turkish shoot down of a Russian fighter aircraft.[33] By 2020, however, Turkey found it easier to coordinate its actions in Syria with Russia than with the United States—an ominous development between NATO allies who originally had been brought together by threats from Moscow.[34] Even into the summer of 2022, President Erdoğan continued to talk about the potential need for further Turkish military operations in Syria in talks conducted with Russia and Iran, rather than with the United States.[35] As a coda for how frustrating the United States found working with Turkey in Syria, Secretary of Defense Ash Carter, in his memoirs, after discussing the role that Iran and Russia played in the Syrian Civil War, nevertheless concluded that "it was a NATO ally that caused the most complications for the campaign."[36]

## Israel and the Syrian Civil War

Friction between the United States and Israel over Syria was far less than between the United States and Turkey, but this did not mean that Washington and Jerusalem lacked competing priorities. Instead, the low friction in the US-Israeli relationship stemmed mostly from Israel's low level of involvement in the Syrian Civil War. Friction is created by movement, and there was far less movement on the Israeli side in the Syrian Civil War than the Turkish. There was limited allied friction, but also a limited allied role.

Even as a neighbor of Syria, Israel had limited interests in the Syrian Civil War. As Itamar Rabinovich puts it, the Assad regime was the

"devil we know" for Israel.[37] Assad was no friend of Israel but had kept the border with Israel peaceful. Despite its ties to Iran and Hezbollah, the Assad regime largely kept both clear of the Syrian border with Israel. There was no pressing need from Israel's perspective to be rid of Assad. Facing more volatile borders with Lebanon, Gaza, and the West Bank, and given the deteriorating security situation in the Sinai, Israel had no desire to add a potentially newly volatile border in the Golan to that list. Israel's most significant concern was that the fighting in Syria could bring a Hezbollah or Iranian military presence closer to its border. Even ISIL was seen as a limited threat by the Israelis—who saw it as more interested in intra-Arab and intra-Islamic disputes than in targeting Israel.[38] By the middle of 2020, Israel had conducted over 200 military strikes in Syria since the war began, but those attacks were aimed mostly at Hezbollah or Iranian targets and not designed to markedly influence the course of the civil war in Syria.[39]

Israel not only had limited interests in the Syrian Civil War, but it also had limited means to influence the war, beyond the negative goal of keeping any Iranian or Hezbollah military buildup as far from the Golan as possible—which it could do with periodic military strikes. As F. Gregory Gause stresses, in the regional struggle for power that emerged in the Middle East after the Arab Spring, like the Syrian Civil War, the most important instrument of power has not been conventional military power, but rather the ability to support non-state actors as they engage in a struggle for power domestically. The most valuable asset in such struggles is not a strong army or air force but political connections and an attractive ideology that encourages local actors engaged in those domestic fights to work with you. Despite its significant military advantages, in a struggle for allies seeking domestic legitimacy, acceptance, and advantage, Israel is a weak player in the region.[40]

The overlapping of Israeli interests with American ones in the Syrian Civil War was considerable. Both sought to keep their involvement limited, neither saw unseating Assad as pressing, and both opposed the growth of ISIL or Iranian/Hezbollah power in Syria. In March 2019, the Trump administration even formally recognized Israeli sovereignty over the Golan.[41] Overlap, however, did not mean identity as each state prioritized these interests differently. This is most clear in the case of ISIL, which was the central problem in Syria for the United States, but a secondary one for the Israelis. A growing

Iranian/Hezbollah presence near the Golan was the central issue for Israel, and while the United States also wanted to see Iranian influence in Syria diminish, that took a back seat, especially in the Obama administration, to what it saw as the more important issue of the denuclearization of Iran. As Israeli Defense Minister Moshe Ya'alon characterized Israeli calculations, "In Syria, if the choice is between Iran and the Islamic State, I choose the Islamic State. They do not have the capabilities that Iran has."[42] While not as serious as the different priorities between the United States and Turkey, there were similar worries that Israeli actions could be helping groups like ISIL in Syria given Jerusalem's focus on fighting Hezbollah and Iran.[43] The friction these different priorities created, however, was minimal given Israel's limited goals and actions in Syria. Israel was not seeking to become a key power broker in Syrian domestic politics and had no desire to bring in their own ground troops or proxies in that fight, as Ankara had done. The United States could confidently expect little friction with Israel over Syria—but also a limited Israeli contribution to ending the war.

## Conclusion

The only thing worse than fighting with allies, according to an aphorism often attributed to Winston Churchill, is fighting without them. This insight captures the core tradeoff identified in the case studies of this chapter. Allies are most likely to contribute significantly to any joint endeavor if they see their interests as deeply implicated in that issue. The more they see their interests at stake and the more blood and treasure they are willing to expend, however, the more likely friction is between allies. Alliances are based on overlapping interests, not identical ones. Friction is therefore inherent in any allied relationship, and the more allies are willing to contribute, the greater the potential friction. If the United States wants its allies to do more, it must be willing to accept the inherent friction that comes with it. Rather than seeing that friction as a signal that the alliances are doomed or more trouble than they are worth, that friction should be seen as the norm in coalition warfare—and something to be managed rather than solved.

The serious divisions the United States and Turkey faced over the Syrian Civil War are not anomalies in the relationship. The United

States remains unhappy with Turkey's acquisition of an advanced Russian missile defense system, what Washington sees as the increasingly authoritarian tendencies of the AKP, and its threatening actions with Greece over natural gas reserves, to name just a few other prominent divides. Similarly, Turkey remains unhappy with US economic sanctions, what Ankara saw as Washington's lack of support in warding off the failed coup attempt of 2016, and the cancellation of Turkey's participation in the F-35 program. On the other hand, Turkey's strategic location still provides the US access to key military facilities, Turkey possesses a large and professional armed force that it is willing to use, and Turkey offers a promising natural gas route to Europe that is outside of Russian control. Similarly, the Turkish economy is still dependent on its economic ties to the United States (and the EU), and NATO still offers a valuable security blanket against threats from Moscow.[44]

The only sure way to eliminate friction from alliance relationships is to eliminate alliance relationships. The United States could decide that Turkey's actions against US-supported forces in Syria mean that Ankara should no longer be considered an ally. Conversely, the United States could decide that Turkey is far more important to the United States than the Syrian Kurds, especially after ISIL has been largely defeated, and decide to cut that relationship to smooth things over with Ankara.[45] Eliminating allied friction, however, is an unachievable goal that could lead the United States to unwise extremes. In the aftermath of the 2003 Iraq war, Turkey had similar worries about the growing autonomy and independence of the Iraqi Kurds—and even threatened to invade Iraq to eliminate what they saw as a growing threat. Rather than break with either the Iraqi Kurds or Ankara, Washington worked to minimize the friction. It shared intelligence with Ankara on potential terrorist attacks, worked to distance the Iraqi Kurds from the PKK, and overall sought to improve ties between initially suspicious allies. Such a path will be far harder in Syria—as the ties between the Syrian Kurds and the PKK are far deeper than those that linked the PKK with the Iraqi Kurds—but such a path still holds the potential to minimize allied friction—without severing valuable allied relationships. Just as the US has to manage the tradeoffs among its competing interests, it must similarly manage the friction with allies forced to make similar tradeoffs.

### Notes

1. An audio recording of Vice-President Biden's comments is available here: https://www.youtube.com/. The comments on Syria and American allies come at about 1:33:30. (This source is now private and is only accessible to those who are able to "sign in." Ed.) For insightful comments on earlier drafts of this chapter, I would like to thank Kristin Bashir, Sean Braniff, Josh Goodman, and David Sorenson.

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3. For discussions of Turkey's interests in the Syrian Crisis see, Muhittin Ataman and Çağaty Özdemir, "Turkey's Syria Policy: Constant Objectives, Shifting Priorities," *Turkish Journal of Middle Eastern Studies* 5, no. 2 (2018): 13–35; and Ömer Taşpinar, "Turkey's Strategic Vision and Syria" *Washington Quarterly* 35, no. 3 (Summer 2012): 127–40. On the energy issue and relations with Iran in particular see Henri J. Barkey, "Turkish-Iranian Competition after the Arab Spring" *Survival* 54, no. 6 (December 2012–January 2013): 139–62; Iain William MacGillivray, "The Paradox of Turkish-Iranian Relations in the Syrian Crisis," *Third World Quarterly* 41, no. 6 (2020): 1046–66; and Özden Zeynep Oktav, "Turkish-Iranian Relations in Syria: Between Rivalry and Engagement" in ed. Raymond Hinnebusch and Adham Saouli, *The War For Syria: Regional and International Dimensions of the Syrian Uprising*, (New York: Routledge, 2020), 176–88. On domestic politics see Aneta Hlavsová, Kristýna Tamchynová and Radka Havlová, "Public Opinion and the Fear of Terrorism: Turkish and US Involvement in the Syrian Conflict," *Mediterranean Quarterly* 29, no. 2 (June 2018): 27–53; and Ahmet T. Kuru, "Turkey's Failed Policy toward the Arab Spring: Three Levels of Analysis," *Mediterranean Quarterly* 26, no. 3 (September 2015): 94–116.

4. Quoted in Carolyn James and Özgür Özdamar, "Modeling Foreign Policy and Ethnic Conflict: Turkey's Policies Towards Syria" *Foreign Policy Analysis* 5 (2009): 17–36. For a broad overview of the relationship see Michael B. Bishku, "Turkish-Syrian Relations: A Checkered History" *Middle East Policy 19*, no. 3 (Fall 2012): 36–53.

5. Burak Bilgehan Özpek and Yelda Demirağ, "Turkish Foreign Policy after the 'Arab Spring': From Agenda-Setter State to Agenda-Entrepreneur State," *Israel Affairs* 20, no. 3 (2014): 332.

6. Birgül Demirtaş, "Turkish-Syrian Relations: From Friend 'Esad' to Enemy 'Esed'," *Middle East Policy* 20, no. 1 (Spring 2013): 114.

7. Quoted in Özlem Demirtas-Bagdonas, "Reading Turkey's Foreign Policy on Syria: The AKP's Construction of a Great Power Identity and the Politics of Grandeur," *Turkish Studies* 15, no. 1 (2014): 139–55.

8. Bülent Aras and Rabia Karakaya Polat, "From Conflict to Cooperation: Desecuritization of Turkey's Relations with Syria and Iran," *Security Dialogue* 39, no. 5 (October 2008): 495–515. The authors did recognize that this desecuritization process was still in its infancy and fragile, 503. On the rise and decline of the desecuritization process see also Cenap Çakmak, "Turkish-Syrian Relations in the Wake of the Syrian Conflict: Back to Securitization?," *Cambridge Review of International Affairs* 29, no. 2 (2016): 695–717; and Shaimaa Magued, "Turkey's Economic Rapprochement towards Syria and the Territorial Conflict Over Hatay," *Mediterranean Politics* 24, no. 1 (2019): 20–39.

9. Michaël Tanchum, "The Logic Behind Lausanne: A Geopolitical Perspective on the Congruence between Turkey's New Hard Power and its Strategic Reorientation," *Insight Turkey 22,* no. 3 (2020): 43–45.

10. Soner Cagaptay, *Erdogan's Empire: Turkey and the Politics of the Middle East* (London: I.B. Tauris, 2020), xvii. Emphasis in the original.

11. Murat Yeşiltaş, "Deciphering Turkey's Assertive Military and Defense Strategy: Objectives, Pillars, and Implications," *Insight Turkey* 22, no. 3 (2020): 89–114, https://www.insightturkey.com/.

12. Kuru, "Turkey's Failed Policy," 102.

13. Jim Zanotti and Clayton Thomas, *Turkey: Background and U.S. Relations in Brief*, R4400 Congressional Research Service, (1 September 2020): i.

14. Sertif Demir and Muzaffer Ercan Yilmaz, "An Analysis of the Impact of the Syrian Crisis on Turkey's Politic-Military, Social and Economic Security," *Gazi Akademik Bakiş* 13, no. 26 (2020): 1–19.

15. Cagaptay, *Erdogan's Empire*, 96–101.

16. Philip Robins, "Turkey's 'Double Gravity' Predicament: The Foreign Policy of a Newly Activist Power," *International Affairs* 89, no. 2 (2013): 389–92. See also Ziya Öniş, "Turkey and the Arab Revolutions: Boundaries of Regional Power Influence in a Turbulent Middle East," *Mediterranean Politics* 19, no. 2 (2014): 203–19.

17. See Marwa Daoudy, "The Structure-Identity Nexus: Syria and Turkey's Collapse," *Cambridge Review of International Affairs* 29, no. 3 (2016): 1074–96. See also Demirtaş, "Turkish-Syrian Relations"; and Kamal Alam "The Assad-Erdogan Relationship: A Mirror into Syrian-Turkish Ties," *Asian Affairs* 51, no. 1 (2020): 95–108.

18. Idrees Mohammed, "Turkey and Iran Rivalry on Syria," *Alternatives: Turkish Journal of International Relations* 10, 2–3 (Summer-Fall 2011): 87–99, https://ciaotest.cc.columbia.edu/.

19. Cagaptay, *Erdogan's Empire*, 116.

20. Hekin Sari Ertem and Radiye Funda Karadeniz, "Lost in Translation: A System's Level Analysis of the Turkish-U.S. Alliance under the Obama and Trump Administrations," *Perceptions* 24, no. 1 (Spring-Summer 2019): 7–38; and Cagaptay, *Erdogan's Empire*, 117–20.

21. Kuru, "Turkey's Failed Policy," 98–100; and Cagaptay, *Erdogan's Empire*, 106–8.

22. Emrullah Uslu, "*Jihadist* Highway to *Jihadist* Haven: Turkey's *Jihadi* Policies and Western Security," *Studies in Conflict and Terrorism* 39, no. 9 (2016): 781–802.

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24. For an overview of Turkish-Kurdish Relations see Michael M. Gunter, *The Kurds: A Modern History* (Princeton: Markus Wiener Publishers, 2016), "Chapter 2: The Kurds in Turkey: Change and Continuity."

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26. See Oray Egin, "The Game Changer: Syria, Iran and Kurdish Independence," *World Affairs* 176, no. 1 (May/June 2013): 64–72; and Michael M. Gunter and M. Hakan Yavuz, "The October 2019 Turkish Incursion into Kurdish Syria: Its Background and Broader Implications," *Middle East Policy* 27, no. 1 (Spring 2020): 86–101.

27. On Turkey's calculations in Syria see Henri J. Barkey, "Turkey's Syria Predicament," *Survival* 56, no. 6 (December 2014–January 2015): 113–34; and Burak Bekdil, "Turkey's Double Game with ISIS," *Middle East Quarterly* 22, no. 3 (Summer 2015): 1–8.

28. For the estimate of "four or five" trained fighters see General Lloyd Austin's testimony to the Senate Armed Services Committee, "Hearing to Receive Testimony on U.S. Military Operations To Counter the Islamic State in Iraq and the Levant," September 16, 2015, 35, https://www.armed-services.senate.gov/. See also Kilic Bugra

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29. On the reaction to the failure of Turkey to assist the Syrian Kurds in the Kobane campaign, see Gunter, "Iraq, Syria, ISIS, and the Kurds," 109; and for the electoral aftermath see Cagaptay, *Erdogan's Empire,* 130; Gunter and Yavuz, "The October 2019 Turkish Incursion into Kurdish Syria," 91; and F. Stephen Larrabee, "Turkey and the Changing Dynamics of the Kurdish Issue," *Survival* 58, no. 2 (April–May 2016): 67–73.

30. Ellen Francis and Ezgi Erkoyun, "Erdogan: We Will 'Strangle' US-Backed Force in Syria 'Before It's Even Born'," *Reuters,* 15 January 2018, https://www.reuters.com/.

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32. See "Read Trump's Letter to President Erdogan of Turkey," *New York Times*, 16 Oct 2019, https://www.nytimes.com/.

33. Cagaptay, *Erdogan's Empire*, 145–46.

34. See William Hale, "Turkey, the U.S., Russia, and the Syrian Civil War," *Insight Turkey* 21, no. 4 (Fall 2019): 25–40.

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36. Ash Carter, *Inside the Five-Sided Box: Lessons from a Lifetime of Leadership in the Pentagon* (New York: Dutton, 2019), 253.

37. "The Syrian Civil War as a Global Crisis," *Sfera Politicii* 25, no. 1–2 (January-June 2017): 44–48.

38. See Aymenn Jawad Al-Tamimi, "The Jihadi Threat on Israel's Northern Border," *Middle East Review of International Affairs* 20, no. 1 (Spring 2016): 22–34.

39. Carla E. Humud, Christopher M. Blanchard, and Mary Beth D. Nikitin, "Armed Conflict in Syria: Overview and U.S. Response," *Congressional Research Service*, 27 July 2020, i, https://apps.dtic.mil/.

40. F. Gregory Gause III, "Beyond Sectarianism: The New Middle East Cold War," *Brookings Doha Center Analysis Paper* 11 (July 2014): 3–22. See pp. 1–4 and 19 in particular. See also Soren Schmidt, "The Middle East Regional Security Complex and the Syrian Civil War" in *The War for Syria: Regional and International Dimensions of the Syrian Uprising*, ed. Raymond Hinnebusch and Adham Saouli (New York: Routledge, 2020), 17–36.

41. The White House, "Proclamation on Recognizing the Golan Heights as Part of the State of Israel," 25 March 2019, https://trumpwhitehouse.archives.gov.

42. Quoted in Elisabeth Marteu, "Israel and the Jihadi Threat," *Survival* 60, no. 1 (February–March 2018): 85–106.

43. Marteu, "Israel and the Jihadi Threat," 89.

44. On the tensions and the continued value of the U.S.-Turkey alliance, see Luke Coffey, "Start Small and Think Big to Rebuild the U.S.-Turkey Relationship," *Insight Turkey* 22, no. 2 (Spring 2020): 11–22; Bill Park, "Turkey's Isolated Stance: An Ally No More, or Just the Usual Turbulence?," *International Affairs* 91, no. 1 (May 2015): 581–600; Jim Zanotti and Clayton Thomas, *Turkey: Background and U.S. Relations in Brief*, CRS R44000 (Washington, DC: Congressional Research Service, 1 September 2020); Ali Balci, "A Three-level Analysis of Turkey's Crisis with the U.S.-Led Order," *Insight Turkey* 21, no. 4 (2019): 13–24; and Cagaptay, *Erdogan's Empire*, 217–29.

45.  See Tomáš Kaválek and Miroslav Mareš, "PKK's Friends and Foes in the Middle East Since 1999," *Central European Journal of International and Security Studies* *12*, no. 2 (February 2018): 100–129; and see Michael Doran's discussion in Phillip H. Gordon, Michael Doran, and Jon B. Alterman, "The Trump Administration's Middle East Policy: A Midterm Assessment," *Middle East Policy* 26, no. 1 (Spring 2019): 5–30.

Chapter 5

# Iran's Contribution to the Battle against the Islamic State

*Jonathan K. Zartman*

Iran responded to the rise of the Islamic State by extending its well-established policy of working with and through proxy forces. Through this pattern of action, sometimes called a "playbook," Iran has greatly increased its influence throughout the region.[1] Iran has fought the Islamic State by preserving Iraq and Syria as states, while building massive networks of independent militias. Therefore, the first section of this description of Iran's activities requires a survey of Iran's support for these various forces and Iran's relationship with the governments of Syria and Iraq. The second major section describes Iran's reaction to the rise of the Islamic State, with the divergent strategies employed in Iraq and Syria. In Syria, Iran has supported the government against all of its enemies and directed most of the effort against the diverse opposition forces threatening the major cities and the Mediterranean coast. In Iraq, most of the Iranian aid and arms have flowed to those militias that Iran had supported even before the 2003 invasion of Iraq, especially those that support Iran's political ideology.

In Syria, the government mobilized religious minorities—Alawites, Shia, and Christians—against the majority Sunnis. Despite the fragmented nature and profusion of opposition movements, Iranian agents and proxy forces mobilized an array of militias to fight a sustained guerrilla campaign. Iran and its proxies recruited great numbers of fighters but could not break the stalemate of war that developed. Although Russian airpower played a role in breaking that stalemate, Iranian and Hezbollah officials facilitated and mediated the air operations. The superior numbers and training of ground forces mobilized by Iran played the crucial winning edge for the Syrian government to survive. In Iraq, the long history of operations by Iranian agents and Iranian-supported militias facilitated a rapid mobilization of resistance to the Islamic State. Iraqi commanders served as liaisons and conduits for ground forces, primarily led, trained, and funded by Iran and Hezbollah, to benefit from American air support. Both governments

survived because of Iranian support in money, weapons, and mobilized militia forces.

## Iran's Support for Syria

Since 1979, Iran has built an increasingly supportive relationship with the government of Syria. Before the Islamic Revolution in Iran, the Soviet-client, secular, Arab-nationalist Republic of Syria under Hafez al-Assad held antagonism toward the monarchical, Western-aligned, Persian-nationalist government of the Shah, Mohammed Reza Pahlavi. After 1979, the revolutionary, Shia Islamic government sought to build an alliance with Syria. In the face of united resistance by almost all the Sunni Arab states, good relations with Syria during the war with Iraq gave Iran a badly needed ally. Through this alliance, both states gained greater state capacity and influence.[2] Syrian support for Iran pushed Syria into further isolation from the rest of the Arab world. Syria's relations with Iran have suffered several points of conflict, but Iran ultimately found it advantageous to preserve the relationship. In 2005, Syria came under international pressure after Hezbollah agents, supported by Syria, assassinated a very wealthy, charismatic Lebanese politician named Rafik Hariri in Beirut. Soon after this, Iran and Syria signed a mutual defense treaty. Under the presidency of Mahmoud Ahmadinejad, relations grew ever closer. In documenting the cultural diplomacy between Syria and Iran, Nadia von Maltzahn shows that this alliance represented a pragmatic political calculation with very little popular support.[3] In addition to providing a land link to Lebanon for Iran, Syria holds 13 shrines visited by Shia pilgrims, most importantly a memorial to Sayyida Zaynab, the sister of Imam Husayn, the son of Ali and grandson of the prophet Muhammad.[4]

Although Syria claims the mantle of Arab nationalism, a minority religious group called the Alawites (known as the Nusayris by the Sunnis) dominates the al-Assad government and military. This impairs greater regional acceptance or support in the Sunni Muslim world.[5] In 1963, Ayatollah Hasan Mahdi al-Shirazi accepted the Alawis as Shia, and in 1973, the head of the Lebanese Shia Supreme Council, Imam Musa al-Sadr, took a major step toward aligning the Assad regime with the Shia cause. To gain an external sponsor for his impoverished people in Lebanon, he issued a fatwa calling the Alawites a

legitimate part of Shia Islam.[6] Encouraging this relationship with Syria facilitated Iran's efforts to develop the organizational and military capabilities of its Lebanese client militia, Hezbollah.

### The Premier and Exemplary Proxy Force: Hezbollah

Before 1979, Iranian revolutionaries received military training from Palestinian militants. Iran has adopted the Palestinian cause—in opposition to Israel—as a way to claim legitimacy as supporters of the oppressed, a show of devotion to a cause claimed by the broader Islamic world. After gaining power in Iran, Ayatollah Khomeini soon sought to export his Islamic revolution, beginning in Lebanon. He refused to support the existing, dominant Shia Amal movement due to its nationalist ideology as part of Lebanon and antagonism to the Palestinians. Amal refused to accept Khomeini's claims of universal religious authority. Iran demonstrated its ideological commitments by supporting the predominantly lower socio-economic class of Lebanese Shia. Despite initial resistance from Amal and the government of Syria, the Islamic Revolutionary Guards Corps (IRGC), commonly called the *Pasdaran* (Guards), eventually established military training camps in the Beqaa Valley.[7] The 1982 Israeli invasion of southern Lebanon changed Lebanese attitudes and Syrian policy to allow this military training. Then, Iranian-trained fighters began attacking Israeli and American interests.

The Lebanese Shia militias that Iranian forces trained and supported with financing, arms, and logistics became Hezbollah. After a protracted struggle, Hezbollah defeated Amal, which Syria had backed.[8] With Iranian support, Hezbollah became a powerful "state within a state," with its leaders serving in the Lebanese parliament and in coalition governments. Hezbollah has developed large, robust health, education, and welfare institutions, employing technologically advanced media production, supported by an international fund-raising network. At various times, the Syrian military has intervened in Lebanon to protect and enforce Hezbollah's power in Lebanon. Hezbollah receives all of its weapons and much of its funding from Iran. Although Iran obscures the precise amounts that it spends on Hezbollah, in 2010, estimates ranged up to $200 million per year.[9]

The leaders of the Iranian revolution created the *Pasdaran* to protect themselves because they did not trust the regular Iranian military. Therefore, Iran has two separate military systems. The regular,

conventional Islamic Republic of Iran Army (also called Artesh), air force, and navy serve in a kind of secondary status to the IRGC army, navy, and air and space force. The government of Iran gives the newest and best equipment and training to the *Pasdaran*, while the regular army mostly *gets s*econd-hand and older equipment. The IRGC also includes a volunteer paramilitary reserve force called the *Basij* (meaning "mobilization").[10] The government uses the *Basij,* frequently in civilian clothes, to act as a "morality police," enforcing Iran's dress code and gender roles and suppressing demonstrations and protests.[11] In addition to funding from the government budget, the IRGC operates a large number of lucrative businesses and obscures some of its financial activities under charitable foundations.[12] While most of the IRGC has focused on defending Iran's borders and controlling the population, Iran conducts covert and external intelligence operations all over the world through an elite, special operations IRGC division known as the Quds Force (IRGC-QF) consisting of about 15,000 men. For example, the Quds Force has worked to develop clients in Iraq, Afghanistan, Pakistan, Bahrain, Palestine, the Gaza Strip, and Yemen, but Hezbollah in Lebanon became its premier agent.[13]

The Syrian government's brutal response to the initial protests in March 2011 provoked an expanding civil war. Iran has supported the government of Syria unconditionally in this struggle. Hezbollah officers and IRGC-QF leaders advised the Syrian government from the beginning, but the government remains responsible for its strategy.[14] Both the government of Iran and Hezbollah initially claimed that they were only offering political support, advice, and assistance. In 2012, Iran persuaded Hezbollah to mobilize its fighters to support Syrian government forces, while initially trying to maintain a plausible deniability. After observers reported on the funerals of Hezbollah fighters killed in Syria on 25 May 2013, Hezbollah's leader Hassan Nasrallah spoke openly of its military role in Syria. In addition to higher level officers offering strategic guidance and advice, Hezbollah took the lead in conquering rebel territory, especially in towns close to the Lebanese border (Al-Qusayr—seized in early June 2013) and towns on the main supply line from Damascus (Yabroud—seized in March 2014, and Al-Zabadani—seized July 2015).[15]

Iran's fight against ISIS used Hezbollah commanders to provide crucial training, command, and control of a variety of militias. After mobilizing Hezbollah for the fight, Iran also sent those Iraqi Shia militias

over which it had the strongest command and control. As Arab-speaking Shia, the Hezbollah officers could effectively guide and command other Shia Arab militias. Hezbollah fighters had credibility due to their success in defeating and humiliating Israel in combat. As fighters and operational planners with decades of insurgent and guerilla warfare experience, Hezbollah advisors worked with commanders of the IRGC-QF to give the Syrian military valuable help. The Syrian Arab Army, with its focus on large-scale tank warfare, lacked the orientation or training for urban civil warfare. Furthermore, many of the Syrian Sunni conscripts deserted relatively early in the conflict, leaving most regiments and battalions severely short on personnel. As the Syrian government steadily lost territory to the opposition militias, Iran increased its commitment of forces.

### Iran's Iraqi Client Militias

During its 1980–88 war with Iraq, Iran provided training and financial support to several Iraqi Shia groups. The story of Iraqi forces fighting for Iran begins with the internal resistance to Saddam Hussein during this war. Iran worked through the IRGC-QF and Lebanese Hezbollah to actively train and support Shia insurgent forces in Iraq. These included several competing movements: 1) The Supreme Council for Islamic Revolution in Iraq (SCIRI, later the ISCI) which formed the Badr Corps—ultimately becoming the Badr Organization; 2) The Mahdi Army (*Jaish al-Mahdi,* JAM), led by Muqtada al-Sadr; 3) Splinter groups from JAM such as the Khazali network, or the *Asaib Ahl al-Haq* (AAH); and 4) Other new groups such as the *Kata'ib Hezbollah* (KH). Iranian support for competing Iraqi Shia opposition movements during its war with Iraq laid the foundations of the militias that contributed to fighting ISIS in both Syria and Iraq in 2014.

Iraqi Islamic activists created the Dawa Party in 1958. But the rise of the Communist Party stimulated Islamists to develop the SCIRI.[16] Iran supported the leaders of SCIRI and the Dawa Party, who took refuge in Iran during its war with Iraq. With Iranian support, these exiles created the Badr Brigade to fight for Iran.[17] The Iraqi Baath regime initially chose Mohammad Sadeq al-Sadr to compete against the SCIRI and the quietist Ayatollah, Ali al-Sistani. Sadeq al-Sadr built a very large support network inside Iraq, building on the work of his cousin and teacher, the highly esteemed scholar Baqir al-Sadr. After Baqir criticized the government, he was assassinated in 1999.

His son, Muqtada al-Sadr, lacked his father's reputation as an Islamic scholar but worked surreptitiously—under government surveillance—to create a social movement dedicated to his father's memory, based on service to the poor, disadvantaged Shia. During the Iran-Iraq war, Iran helped Iraqi Shia fighters organize arms smuggling networks to supply rebel militias inside Iraq, such as Muqtada al-Sadr's Mahdi Army, which grew very large and effective with Iranian support.[18] The Sadrist Movement refers to all the groups which follow the teaching of Sadeq al-Sadr and Baqir al-Sadr, both loved for their scholarship and support for the Iraqi Shia community. Even though Muqtada al-Sadr has not approved his men going to fight for the Assad regime in Syria, several of the militias in Syria claim experience fighting in the Mahdi Army and loyalty to the legacy of Sadeq and Baqir al-Sadr.[19]

After the 2003 US-led invasion, the members of the Dawa Party returned from exile and became the ruling political party of Iraq. In 2007, SCIRI changed its name to the Islamic Supreme Council of Iraq (ISCI) and reduced its commitment to Iranian ideology. This led to a split with Badr, which remained under Iranian political ideology.[20] The Badr Brigade became the Badr Organization and gained significant influence in the Iraqi government security agencies. Its leader, Hadi al-Amri, and other senior leaders have held ministerial positions.[21] The Badr Organization cooperates militarily with the United States and other western countries, while still receiving Iranian support, which has enabled it to become Iraq's most powerful militia. The combination of military power and participation in government means that Badr is becoming more like the Lebanese Hezbollah. Several smaller militias that fought in Syria 2012–14 claim loyalty to the Badr Organization.

Iran continued to support Badr, while increasing its support to Muqtada al-Sadr and his JAM, which waged insurgent warfare against the US-led occupation, waged sectarian warfare against Sunnis, and fought against competing social movements—Badr, and the leaders of the establishment Shia seminaries of Najaf. With financing and training from Iran and IRGC-QF officers, Muqtada developed a large and effective organization, based in part on his father's reputation. Iran also encouraged splits in this movement and provided funding and training to these new militias. For example, Qais al Khazali, a former deputy to Muqtada and a student of his father, in 2006 created the AAH, which became one of the most prominent militias in Iraq and later Syria. Ranj Alaaldin reports that Prime Minister Nouri

al-Maliki took sides with *AAH* to weaken his rival Muqtada and the Sadrist movement.[22]

In sum, during the US-led occupation, Iran created a number of independent, often competing militias, each of which developed its own local base of support. For instance, in 2007 a new group called KH began conducting effective and sophisticated attacks on US forces in Iraq. Analysts describe KH as a small, elite group trained by the IRGC-QF and Lebanon's Hezbollah in Iran and later southern Iraq. It became very effective under the leadership of Jamal Jaafar Ibrahimi—more commonly known as Abu Mahdi al-Mohandes—a terrorist accused of attacks in 1983.

These groups reacted in different ways to the withdrawal of American troops from Iraq in 2011. Muqtada al-Sadr had begun moving into politics and rebranding himself as an Iraqi nationalist, trying to compete with the Badr Organization. He initially disbanded his militia, renamed as the *Saraya al-Salam* (Peace Brigades), but with Iranian support, many Jaish al-Mahdi fighters joined or created new groups. Near the end of 2011, as conditions in Syria deteriorated from demonstrations into insurgency, Iran brought many Iraqi Shia fighters to Iran for training in new tactics and procedures. By early 2012, the IRGC-QF was moving these fighters, especially AAH and KH, into Syria to support the Assad regime.

The IRGC-QF and Lebanon's Hezbollah organized and supported a new brand in Syria to serve as a central hub of recruiting and fund raising for the Iraqi fighters called the *Liwa Abu al-Fadl al-Abbas* (Abul-Fadl al-Abbas Brigade, LAFA).[23] It includes a variety of militias, most importantly: approximately 2,000 men with *AAH,* an estimated 400 fighters with KH, and other smaller groups such as *Kataib Sayyid al-Shuhada* and *Liwa al-Youm al-Mawud* (Promised Day Brigades).[24] Aymenn Al-Tamimi has documented the overlapping character of the vast profusion of groups using the LAFA label, meaning some commanders claimed positions in multiple groups simultaneously.[25] He notes that these "Iran-aligned groups play the most prominent role on the frontlines in the pushback against ISIS."[26] He reports that some Iraqi militias went to Qamishli airport on the far northeast border of Syria near Turkey to block the ISIS offensive to capture Hasaka city.[27] They have worked with Hezbollah and the Syrian military in efforts to regain control over western Syria but have suffered some failures.

In the same way, Hezbollah and the IRGC-QF created an umbrella organization for recruiting Syrian fighters called the Popular Committee for the Mobilization to Defend Sayyeda Zaynab, with connections to other Iranian client militias. It boasted an active Facebook and YouTube recruiting effort with effective posters. Iran used a variety of online recruiting strategies very effectively, supported by a large phone bank of recruiters.[28]

In sum, because Iran had spent more than 30 years funding and training Hezbollah in Lebanon, and more than 20 years developing a variety of competing Iraqi militias, both with battle-hardened, experienced fighters, it could provide substantial practical military aid to both Syria and Iraq when the Islamic State began to challenge both states. In addition, the IRGC-QF and Lebanese Hezbollah began to form a variety of new groups in Syria to support the government against the multitude of opposition groups. Those composed of Iraqi fighters—recruited and trained by the IRGC and Hezbollah—would engage the Islamic State in combat in both Syria and Iraq.

In 2012, as Iran—through the IRGC-QF—began sending Iraqi fighters to Syria, the Quds Force also began sending Afghan Shia Hazaras, initially called the Fatemiyoun Brigade. Iran also recruited a smaller number of Pakistani Shia, sending them relatively later, calling this group the Zaynabiyoun Brigade. Describing Iran's contribution to the struggle against the Islamic State requires a short explanation of each of these groups.

**The Fatemiyoun Brigade**. Iran has contributed to the struggle against the Islamic State by enabling the Syrian government to overcome its central demographic problem—as a minority government oppressing the Sunni majority. By recruiting Shia Afghans—mostly the Hazara, a minority Shia group in Afghanistan—Iran developed large masses of troops to throw against the opposition. In Afghanistan, the dominant Sunni Pashtuns often persecuted and oppressed the Hazara. The Hazara language represents a mixture of Dari—the Afghan dialect of Persian—with about ten percent of the words derived from Mongol.[29] Jamal notes that the Fatemiyoun also includes fighters from the Shia Sayyed, Bayat, and Qizilbash ethnic groups.[30] Iran has refused to give residency to or to legalize the status of an estimated two million Afghan refugees, which leaves the men vulnerable to exploitation as cheap labor. It also exposes them to coercive recruitment to fight in Syria. Based on the stories of Fatemiyoun fighters interviewed later, analysts note a common scenario. The IRGC

promised a $700/month salary and a residence permit after service, to enable them to live and work in Iran.[31] The IRGC Quds Force recruited, trained, and sent them to Syria, originally under the name the Fatemiyoun Brigade. It is now called a division, indicating numbers between 10,000 and 20,000, although skeptical analysts put the numbers much lower.

Basil Nicobin does not consider the Fatemiyoun mere mercenaries because of the supporting role of religious faith in their decisions to go and fight in Syria and because recruiters used significant coercion.[32] Recruiters initially told the fighters that they would defend the shrine of Sayyeda Zaynab near Damascus. Hundreds of thousands of Shia pilgrims from around the world visit the shrines of Sayyida Zaynab and Sayyida Roqayya, both located in Damascus.[33] The IRGC takes Afghan recruits to the Sayyida Zaynab shrine to give them greater religious motivation to fight, rather than fighting merely for money and status. The IRGC has used social media and mass media to amplify the recruiting message. He concludes that a mixture of factors, including youthful adventurism and religious passions, motivated Afghan Shias living in Iran to become part of the struggle in Syria; however, economic deprivation and vulnerability drove most of their decisions. Moreover, the process of fighting transformed their motivations.

A significant number of Afghans have fought on all the fronts of the Syrian civil war. Most of the Afghans killed in Syria died in places far from Damascus, such as Palmyra, Aleppo, Daraa, and many other places. An Iranian official claimed that at least 2,000 Afghans have been killed fighting in Syria and 8,000 wounded.[34]

Surveys of Afghans who had served in Syria reveal that very few had any military experience before joining the Fatemiyoun. Iran gave them between 20 and 60 days of training. All sides treat them as irregulars. Once deployed, the Syrians treated them with contempt, and the IRGC used them in massive numbers in dangerous frontal assaults, resulting in a very high rate of casualties. Although some claim that they were recruited in Kabul, the Afghan government denies knowing about the IRGC recruiting in Afghanistan. The government of Afghanistan shows no concern for their condition.[35] Even though some Ayatollahs have opposed the coercive recruitment of Afghans to fight in Syria, the economic conditions of the Afghans and the IRGC recruiting and media messages have carried a greater weight.[36]

**The Zaynabiyoun Brigade**. Compared to the other major militias used by the IRGC to support the Assad regime, analysts have given less attention to the Pakistani Shia group called the Zaynabiyoun Brigade, in part because of its smaller size. Furthermore, the government of Iran does not release much information about them to protect them from infiltration by the Pakistani Inter-Services Intelligence and retribution from extremist Sunnis in Pakistan.[37] A survey of funeral notices between January 2012 and January 2018 found 153 Pakistani nationals killed in Syria and three in Iraq, compared to 841 Afghans and 1,213 Lebanese.[38] The Pakistani dead come from eight known cities, mostly in Parachinar where Sunni militants have made life difficult for Shia.[39] Approximately 38 million Shia live in Pakistan (about 20 percent of the total population), the second largest concentration in the world after Iran. In addition, 500,000 Shia Hazara live in Quetta, Pakistani Baluchistan, where they suffer oppression and persecution from Sunni extremists. The IRGC has worked to recruit Shia from Pakistan who have gone to Iran, ostensibly for tourism or study.[40] Iran has recruited among the far lower total numbers of Pakistani Shia in Iran in the same way as with Afghans, but their contribution to the fight in Syria came later, in 2013. Ali Alfoneh notes the Iranian media first mentioned the Zaynabiyoun Brigade in reporting the funeral of a man killed in combat in Iraq in June 2014.[41]

**The National Defense Forces**. In 2012, under Iranian encouragement, the Syrian government began to formally unify supportive local militias.[42] This built on an existing tradition of the Baath Party and other powerful parties, using irregular, local militias (*Jaysh al-Sha'bi,* People's Army) for important political tasks. In addition, the government had already been using civilian criminal gangs called the Shabiha or "ghost" forces as auxiliaries in the civil war. In 2011, the government transformed the popular committees in Alawite neighborhoods into well-trained, well-supplied militias used for controlling dissent and for consolidating control after a military conquest.[43]

The Syrian government announced the National Defense Forces (NDF) program on 9 January 2013.[44] It brought the popular committees into a formal legal structure in which they could provide local security and receive a regular salary, training, and supplies. Iran, through Hezbollah and the IRGC-QF, has provided training and operational support, but these units do not come under Iranian command and control. Iran did not try to indoctrinate the NDF members but considered them a source of long-term future influence. At least

formally, they come under the command of provincial level commanders. Initially, rich businessmen associated with the regime financed the first groups, but as their number expanded, they relied on Iranian funding. By early 2016, that funding was declining.

The focus on local protection means that the character of the individual units varies: they reflect the local religious commitments and ethnicity of the population. They also vary in the quality of training and equipment they receive. They offer superior local intelligence and retain some flexibility and independence. The NDF proved effective at fighting the opposition on their own territory, but when the government tried to deploy them to other areas their capability fell. They suffered heavy casualties at the end of 2013, with the rise of the Islamic State, but then the government reassigned them from the front lines to other duties. Other militias, such as the Fatemiyoun, took over the role of frontline assaults.

With the emphasis on local forces, the Syrian government has even recruited some Sunni Arabs by exempting them from conscription, offering higher salaries than the regular army, and promising them they can remain close to family. They provide an alternative employment for youth who would otherwise be drawn to the opposition. The offer of service in a local NDF unit provides leverage in negotiations to reconcile with disaffected tribes. In sum, the development of the National Defense Forces allowed the Syrian government to substantially increase its military forces. Although not as easily or effectively deployed to other regions of the country, and against the cause of looting, smuggling, and conflict with other regime forces, they did provide local security in many areas, therefore allowing foreign Shia militias to carry the fight to the opposition, including the Islamic State.

## The Rise of the Islamic State

The governments of Iraq and Syria responded differently to the rise of the Islamic State, and Iran's strategy also differed in each country. After the US military, working with Arab tribal leaders in the *Sahwa* (Awakening) substantially defeated Al-Qaeda in Iraq (AQI, the predecessor to the Islamic State), with many of its leaders in prison, the remaining fighters shifted their strategy to insurgency. According to a tabulation in the *New York Times*, the number of attacks attributed to AQI began gradually rising from the low of five in

2006 to 56 the next year and 62 in 2008, then 78 in 2009, 86 in 2010 and falling to 34 in 2011.[45] This led to a false sense of optimism.[46] However, in this period, AQI followed a purposeful strategy of assassinating the *Sahwa* tribal leaders.[47] The US government continued to provide military aid to the government of Iraq, seeking to build its capacity to defeat a simmering insurgency of eight different Sunni militias in Northern Iraq. Iran did not give much attention to this competition, in which Sunnis mostly killed other Sunnis. Iran did monitor the situation, for instance, through an IRGC officer stationed with the Kurdish Patriotic Union of Kurdistan.[48]

Under political pressure from Iran's clients in the Iraqi government, the US withdrew most of its forces in 2011. By 2012, the Islamic State had become the most powerful of the insurgent Sunni militias in the north of Iraq. It began a series of seven assaults on prisons, seeking to release its members and other fighters. This culminated in the 22 July 2013 complex assault on Abu Ghraib, releasing more than 500 men, many of whom would serve as leaders and fighters for the Islamic State in Iraq.[49] The tempo of conflict rose to 603 attacks in Iraq in 2012 and 419 in 2013. Based on an initial mobilization in Anbar province, the group exploited instability in Syria, seizing territory from other rebel groups and taking control of oil wells, granaries, and weapons.[50] With those resources, including control of Raqqa for almost a year, ISIS took Falluja in January 2014.[51] In Iraq, using political and military action, the leaders of the Islamic State defeated any of the other Sunni groups who refused to "repent" and join its ranks.

Because of the progress toward civil war in Syria after March 2011, Iran's efforts in Iraq seemed less active. However, even before the Islamic State captured Fallujah in January 2014, Iraqi Prime Minister Maliki was sending Shia militias into Anbar and Diyala provinces, where they were accused of sectarian abuses.[52] In the middle of violent competition among the Shia militias, Maliki increased his planning to create Popular Defense Brigades.[53] Then the Islamic State conquered Mosul and threatened Baghdad. This dramatic event catalyzed an intensive response by Iraqi politicians, religious leaders, and militia leaders. For Iran, it marked the great turning point, motivating Tehran to implement substantial policy change. It drew fresh global attention to the Islamic State's behavior, ultimately drawing an international reaction.

### Iran's Reaction to the Rise of the Islamic State in Syria

Explaining Iran's reaction to the rise of the Islamic State in Syria also requires describing the general context of the war. Despite advice and assistance from the IRGC-QF and Hezbollah leaders, the government of Syria continued to lose ground for almost two years. The growing successes of the opposition caused frustration and deep concern in Iran. The rebels controlled several Damascus neighborhoods and had attacked the government even in Damascus. For example, a bombing on 18 July 2012 at a special military planning meeting killed four prominent officials, including the defense minister and President Assad's brother in-law.[54] The precision of the targeting by multiple small bombs revealed the work of a high-level insider.[55] It became a symbol of the failure of the Syrian government that greatly increased Iranian and Hezbollah commitment to preserving the Assad regime.[56] As a result, in addition to the high-level officials, much larger numbers of IRGC ground forces and Hezbollah fighters took active combat positions. Based on newspaper funeral notices, analysts document that a large number of Iranian generals and colonels, as well as Hezbollah leaders of similar rank, have died fighting. This indicates that they were leading near the front lines of combat. Because of the increased numbers of Iranian and Hezbollah fighters killed, in May 2013 Iran changed its information strategy. Instead of denying their involvement, the Iranian government and Hezbollah began publicizing the funerals of their "martyrs" and using them to promote patriotism and the moral virtue of their fighters. Without this massive commitment of men, weapons, logistics, and money, the Syrian government could not have survived to face the Islamic State.[57]

After this increased commitment by Hezbollah and Iran, the government began gaining territory, starting first around Damascus, and then on the border of Lebanon, the towns on the logistical lines of supply from Damascus to Lebanon, and further north toward Aleppo. The opposition militias—more than a hundred different fighting groups—could not coordinate their fighting and often fought each other, enabling more Syrian government victories. The pressure of battle forced diverse militias to form coalitions. In addition to the "moderate" Free Syrian Army network, several Islamist networks formed. The Nusra Front (*Jabhat al-Nusra*, JN) a branch of al-Qaeda, gained a reputation for success in attacking the government, the Kurds, and sometimes other opposition groups. That success, compared

to the lack of resources and discipline by the Free Syria Army, drove significant defections to the better-supported and motivated Islamist groups, including JN. On 11 April 2013, the Islamic State of Iraq changed its name to *Dawlat al-Islamiya fi Iraq wa'l-Sham* (Islamic State of Iraq and Syria, ISIS), called *Daesh* in Arabic and Persian, based on the acronym of its name. In late 2013, the opposition coalitions began to have more success against the Syrian government.

Until December 2013, Daesh had fought separate opposition groups to capture oil fields and to control the border crossings to Turkey and avoided provoking a unified response. Since Daesh had not attacked forces or territory held by the Syrian government, the Assad regime did not attack it. When the government bombed positions that the opposition had just taken from the Islamic State, while not bombing them before, the opposition accused the Syrian government of acting as the air force of Daesh. Battles between Daesh and JN and other opposition groups caused the Syrian government little concern. The more they fought each other and not the government, the better for Assad, who concentrated on regaining full control over the heavily populated areas of "useful Syria." In response to provocations and assaults by Daesh, the opposition groups of northern Syria formed a coalition to fight back, at the same time the Islamic State captured Fallujah in Iraq in January 2014. Over the course of 2014, Daesh repeatedly defeated this coalition and gained greater influence in eastern and northern Syria.

In the early months of 2014, many Iraqi Shia militias left Syria to defend Baghdad and fight against Daesh. Iran increased its commitments to Syria by sending large numbers of Afghans, regular IRGC ground forces, the *Basij*, and even special forces units of the regular army (called *Artesh*). During 2014, the Syrian government seemed to be losing the war. The rise of the Islamic State, fueled by massive recruitment of foreign Sunni fighters, made its condition appear even more desperate.

Daesh first struck the Syrian government at the Shaer gas fields on 17 July 2014. The Syrian government quickly regained control, using special forces supported by NDF units. Daesh struck the same facility again in late October, and the Syrian government again retook control with foreign fighters supported by special forces. Syria also bombed Raqqa with indiscriminate attacks that only killed civilians. Daesh captured the Division 17 base on 15 July, the Brigade 93 base on 8 August, and Tabqa Air Base on August 24.[58] While Daesh took

territory in most of the eastern part of Syria, it also had to resist the growing military power of the US-assisted Syrian Democratic Forces. This allowed the Syrian government to give most of its attention to the rest of the opposition in the corridor of the major cities, Alawite, Christian and coastal areas—"useful Syria." By the middle of 2015, Daesh controlled half of Syria and the government only 20 percent.

The survival of the government seemed precarious when Qassem Suleimani went to Moscow on 24 July 2015 and helped negotiate Russia's entrance into the war.[59] As the culmination of months of high-level negotiations, his trip led to Russian airstrikes that began on 30 September 2015, predominantly striking Jabhat al-Nusra, Ahrar al-Sham, and Free Syrian Army positions, in addition to a few against Daesh.[60] This dramatically turned the tide of war. Iran developed joint command centers to coordinate the actions of Russian air support and special forces, the Syrian Army, IRGC, Hezbollah, National Defense Forces, and Iraqi, Afghan, and Syrian militias. The additional striking power of Russian bombing, added to the capabilities of all these Iranian-supplied, directed, and funded combat ground forces, enabled the Syrian government to recapture most of its former territory. The Syrian Observatory for Human Rights claimed that by the end of January 2020, the Syrian government had reclaimed 70 percent of its territory.[61] Therefore, Iranian support enabled the Syrian government not only to survive, but also to reclaim its territory from Daesh. If not for Iranian support for the Syrian government, and bringing in a full Russian military commitment, Daesh could conceivably have taken control of major population centers, with lines of supply and access to the sea. However, this support has carried a horrible human cost, with the massive numbers of deaths, millions displaced, a corrupt and brutal government strengthened in power, and Iran deeply entrenched in Damascus.

## Iran's Reaction to the Rise of the Islamic State in Iraq

Iran reacted strongly after Daesh conquered Mosul and Tikrit on 12 June 2014, threatened Baghdad, and approached the Iranian border. On 12 June the IRGC sent two battalions with experience suppressing ethnic uprisings.[62] On Friday, 13 June, Grand Ayatollah Ali Sistani issued a fatwa urging Iraqis to join the government security services. Leaders of militias supported by Iran exploited this to recruit fighters into their own forces, collectively called *al-Hashd al-Shaabi* (Popular

Mobilization Forces, PMF). The Iraqi government provided some funding and weapons. Iran also gave significant funding as well as advising, training and weapons. Ultimately, approximately 70 different militias claimed status as PMF. Although Christians, Sunnis, Kurds, and Yazidis organized PMF militias that received some government funding, the majority of funding—from both Iran and the government of Iraq—went to the Shia militias most closely aligned with Iran's ideology.

The large numbers of volunteer militias with training and guidance from the IRGC-QF and Hezbollah relatively quickly enabled Iraqi security forces to start defeating and expelling Daesh from the towns it had taken. Juan Cole notes five major successes in the first year: 1) rescuing besieged Shia Turkmen in Amerli; 2) expelling Daesh from Jurf al-Sakhr in late October; 3) retaking the refinery at Beiji in November 2014; 4) pushing Daesh out of Diyala Province and neighboring areas, populated by both Sunnis and Shiites, by January 2015 (in this campaign, the Badr Organization took the lead of a large force of Shiite militias, many trained in Iran and advised on the ground by Iranian officials);[63] and 5) defeating Daesh in Tikrit in early April 2015.[64]

Ariane Tabatabai and Dina Esfaniary highlight the example of the August 2014 liberation of the mixed Shia Turkmen and Kurdish town of Amerli where the Shia militias played a prominent role as ground forces working alongside Iraqi security forces, who were able to call in American air support. "Soleimani's men were crucial to coordinating efforts between the Kurdish Peshmerga forces, the Iraqi military, and the Shia militias in breaking the ISIS siege of Amerli in Northern Iraq."[65] They also note a 2015 Human Rights Watch report documenting the destruction of 47 villages around Amerli by Shia militias, the Iraqi security forces, and volunteer fighters (PMF) in methodical revenge attacks.[66]

This established a pattern for the following campaigns to retake territory from Daesh: offensive operations led by elite forces, such as the Iraqi Counter-Terrorism Service, supported by the Iraqi Army and thousands of fighters belonging to dozens of different PMF militias. The *Wall Street Journal* cites militia leaders and government officials describing the late IRGC-QF commander Qassem Suleimani as providing arms and ammunition to the PMF factions and drawing up the plans for military operations, which the effective PMF

commander Jamal Jaafar Ibrahimi (Abu Mahdi al-Mohandes—also the leader of *Kata'ib Hezbollah*) carried out.[67]

The Shia militias consistently committed reprisal killings and abuse of Sunnis in the aftermath of each conquest, which caused anger and coordination problems for the Americans supporting the Iraqi government.[68] The Americans pressed the Iraqi government not to allow PMF groups to enter the fight in Ramadi in December 2015.[69] The June 2016 fight to take Fallujah was very difficult, and the government initially told the PMF militias to stay away while the militia leaders pressed hard to enter the fight.[70] Many PMF militias, most prominently the Iran-aligned *KH* and *AAH,* fought in the battle to retake Fallujah and afterward executed hundreds of Sunnis. In the campaign for Mosul launched 16 October 2016, the government ordered the PMF to stay out of the city, but they fought actively in the southern axis.[71]

The Iraqi people credit the PMF for turning the tide of war and enabling the defeat of Daesh. The leaders of these militias have exploited this reputation to gain political influence and office. From decades of Iranian support for the most powerful militias, and aid to a broad cross-section of local PMF forces—even among the Kurds, Christians, and Yazidis—Iran has built an enduring base of political influence. Iran's contribution to the fight against the Islamic State took many forms: funding and training dozens of volunteer militias that provided thousands of fighters; providing the combat mass to prevail in almost all the battles against Daesh; providing arms and ammunition to the militias, including in some cases heavy weapons; coordinating the operations of the Iraqi military with militias, often including different ethnic and religious groups; and mediating conflicts between competing militias and groups, such as the Kurds and the Turkmen. While Iran's contribution to the fight against the Islamic State has kept Iraq from collapsing, this has come at the high cost of increasing sectarian conflict, the preservation of corruption, and impunity for war crimes.

## Conclusion

Because the governments of Syria and Iraq owe their continued existence to the billions of dollars of Iranian aid, under any plausible scenario, Iran will sustain significant influence over these two countries.

In addition to its formal political pull, Iran will retain its power over dozens of militias. The Iranian accomplishment in mobilizing tens of thousands of men to fight and persuading them to strive for common interests, to the point of thousands of dead, gives it an enduring base of military power throughout the region for the future. Iranian commanders have built patronage ties with minority religious and ethnic groups, even with little or no alignment to Iranian political ideology. All these connections constitute growing regional political power.

When the Islamic State came into existence, Iran had been funding, training, and arming militias in Iraq for more than two decades, working through the IRGC-QF. Iran sought to replicate the model of Hezbollah in Lebanon it had created three decades earlier. Iran was fully engaged and committed to protecting the government of Syria. Iran has contributed to the struggle against the Islamic State by enabling the Syrian government to overcome its central demographic problem—as a minority government oppressing the Sunni majority.

The Islamic State exploited the existing severe crises of governance and religious polarization in both states, much of which Iran had made worse. By claiming the status of a state controlling territory, Daesh triggered an extraordinary Iranian commitment to the preservation of its client states, Iraq and Syria. With its claim as a Sunni caliphate, Daesh also represented a sectarian ideological challenge. In addition to a sustained commitment of money and arms, Iranian skill in ideological work enabled its proxy militias to recruit large numbers of fighters for costly combat with heavy casualties. The Iranian government has credited much of the success of this program to Brigadier General Qassem Suleimani, who commanded the Quds Force of the IRGC for 22 years.[72]

On 3 January 2020, a US airstrike killed Suleimani and his close friend, Jamal Jaafar Ibrahimi (known as Abu Mahdi al-Muhandis), the founder of the Iran-backed Iraqi Shia militia Kataib Hezbollah and deputy chief (effective commander) of Iraq's Popular Mobilization Forces. Skeptics criticized the legality and consequences of the attack. Other than the extremely large funeral and government media campaign to capitalize on Suleimani's image as a martyr, Iran's direct military reaction demonstrated calibrated restraint.[73] On 8 January 2020, an IRGC air defense battery accidentally shot down Ukraine International Airlines Flight 752 shortly after takeoff from Tehran. The Iranian government tried to avoid responsibility for three days, which triggered high levels of public opposition.[74] The consequences

of killing Suleimani and al-Muhandis include some degree of internal crisis for Iran and a greater fragmentation of Iraqi militias.[75] The public antagonism to Iran in Lebanon and Iraq—expressed during protests and demonstrations—also rose after the death of Suleimani, but public antagonism to the United States also rose.

The character of the war in Syria has shifted with the government's rising control over most of its territory. The Syrian government has reduced the territory under the control of militant Islamist forces to Idlib Province, where Turkey and Russia continue to compete and negotiate spheres of influence. The 4 November 2021 US Department of Defense Office of Inspector General Report (DOD-IG Report) assesses that the Islamic State in Syria constitutes a low-level insurgency in Syria, still conducting sporadic guerilla attacks on regime forces and assets. Militants have concentrated their efforts on recruiting in a displaced persons camp.[76] Meanwhile, US forces continued to help the (Kurdish-led) Syrian Democratic Forces in their complex struggle against the Islamic State, Iranian militias, and the Turkish military. Turkey negotiated with the United States for the creation of a buffer zone of Syrian Arabs on the Syrian side of the border, requiring a massive Kurdish relocation. According to the DOD-IG Report, Iraq still needs American military support in combating the Islamic State. Iranian-aligned groups have used rocket fire, drone attacks, and roadside bombs to attack US forces, provoking US airstrikes in response.[77]

In sum, Daesh retains organizational capacity and a mobilizing narrative and remains a threat to the people of this region. However, Iranian leaders have shifted their focus away from combating the Islamic State to consolidating their political and economic control over Iraq and Syria. This only exacerbates the corruption, repression, and sectarian exploitation that fueled the rise of the Islamic State. American support to Iraqi military forces and the Syrian Democratic Forces serves to restrain an Islamic State resurgence but cannot reduce popular grievances against the governments of Iraq and Syria.

### Notes

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Chapter 6

# The Role of the Kurds in Operation Inherent Resolve[1]

*David Sorenson*

In June 2014, the so-called "Islamic State"—commonly referred to either as ISIS or abbreviated *Daesh*[2]—launched a murderous rampage through Iraq and Syria. Daesh took over 34,000 square miles of Iraq and Syria by the end of 2014, ultimately expanding its "Caliphate" to over 100,000 square miles. Their campaign caused the deaths of over 28,400 people between 2014 and 2018, with hundreds of thousands wounded or left homeless. Thousands more died and were wounded in Daesh-sponsored terrorist attacks around the world. The assault was prefaced by the announcement of a new "Islamic Caliphate" by a shadowy figure who called himself "Abu Bakr al-Baghdadi," whose appearance sent American intelligence specialists scrambling to find out exactly who he was.

The United States formed a task force called Combined Joint Task Force-Operation Inherent Resolve (OIR) in October 2014 to counter Daesh's initial gains. American officials recognized that the Daesh penetration into Iraq threatened many of the hard-won gains that the US and its coalition partners had made since the 2003 operation that ended the Saddam Hussein regime. The Daesh campaign in Syria only added to the carnage of the ongoing Syrian civil war and provided Daesh with an operational base to spread its destruction. American officials also feared that Daesh would carry out its vow to bring the entire Muslim region under its control or at least spread its dominion to other parts of the Muslim population.

The Daesh assault plunged the regional Kurdish populations into the volatile mix of Middle East national, ethnic, and religious differences. Thus, American Middle East policy makers found themselves wrestling with a familiar problem: how to construct policies that would enable the regional Kurdish population to become an asset for US Middle East strategic goals without alienating the other regional governments that regarded the Kurds as either enemies or as at least problems.

This chapter considers the role and consequences of OIR for the Middle East's Kurdish population. It includes a brief overview of Daesh and the OIR response as it impacted the Kurdish populations

in Syria, Iraq, and Turkey. One central tension of the campaign was that it brought in groups marginalized by all the states where it exists to be a key partner in the fight. Thus, a part of this chapter grapples with that tension. The United States has designated a key Kurdish group in Turkey, the Kurdish Workers' Party (PKK) as a terrorist group. Yet the US informally partnered with the People's Protection Unit (YPG) affiliated with the PKK in its battle against Daesh. The United States supports the government of Iraq, yet also supported the anti-Daesh Iraqi Kurdish groups that sought an autonomous Kurdistan. The United States officially opposed the Syrian Assad regime, yet one of the Kurdish forces that had American support ultimately sided with the Assad regime as it fought against Daesh. American leadership tried to dance around this complex problem by engaging with countries where the Kurds lived, and simultaneously with the Kurdish groups themselves, in building an anti-Daesh coalition. As of the summer of 2021, Kurdish groups in northern Syria, like Kurdish groups in Iraq and Iran, found themselves living a precarious existence, attacked by Turkish forces in Syria, and by state forces in Iraq and Iran. The United States had moved on, no longer apparently interested in protecting or advancing Kurdish political interests. This chapter begins with a discussion of Kurdish identities.

## Who Are the Kurds?

While the term "Kurd" identifies a language and cultural ethnic group, the Kurdish population has both similarities and differences among themselves. That is partly because "Kurdish" is a family of languages that includes Kurmanji (written in Latin script in Turkey but Cyrillic in Central Asia), spoken by around three-quarters of the Kurdish population, and Sorani, spoken by some Kurds in Iran and Iraq. A small minority of Kurds speak Zaza (Dimili) and Gurani. Whether or not these are different languages or dialects of Kurdish is a debate, though most Kurds refer to them as dialects, to avoid emphasizing the differences.[3]

The world's estimated 30 million Kurds are concentrated in four countries, where they constitute 10 percent of Iranians, 17.5 of Iraqis, 9.7 of Syrians, and 18 percent of Turks.[4] Most Kurds are Sunni Muslims, with a smaller number of Shia Muslims or Yazidi,[5] but neither religious nor language differences are a major source of Kurdish

disunity. Instead, Kurdish divisions exist within those countries, often based on family or clan rivalries, as the country sections below indicate.

Some of the key Kurdish political groups are summarized here:

- Kurdistan Workers' Party (*Partîya Karkerên Kurdistanê*, or PKK) is a Turkish-Kurdish group.

- Democratic Union Party (PYD) is the dominant Syrian Kurdish political party, which administers the Rojava cantons. The party is linked to the PKK.

- People's Protection Units (YPG), the militia associated with the PYD.Syrian Democratic Forces (SDF), a militia consisting mainly of YPG, along with some non-Kurdish members.

- Kurdistan Democratic Party (KDP) is an Iraqi-Kurdish political party founded by Mustafa Barzani.

- Kurdistan Regional Government (KRG) governs the sem-autonomous Kurdistan Region of Iraq.

- Peshmerga (Pêşmerge, "those who face death") are the security forces for the Kurdish region of Iraq. Once divided between the PYD and the KDP, they were unified in 1992.

- Patriotic Union of Kurdistan (PUK) is an Iraqi Kurdish party founded by Jalal Talabani.

The rise of Kurdish nationalism after the breakup of the Ottoman Empire not only confounded Kurdish relations with their home states (some of them like Syria and Iraq were just forming), but also revealed the cracks in Kurdish identity and the weakness of Kurdish civil society.[6] For centuries, Kurdish identity focused on tribes and families, who were often rivals in the regions where Kurds lived.[7] However, as nationalism grew in the post-imperial Middle East, Kurds found themselves challenged by both Arab and Turkish nationalism. Those nationalisms not only attempted to replace religious identity with linguistic bonds, but also, in the case of Arab nationalism, to build bridges over the nation states that emerged after World War I. Where Kurds were included as Muslims in the Ottoman Empire that covered much of the Muslim world, they became an increasingly marginalized "other" under Arab and Turkish nationalism. The Kurds are not only divided by the countries where they reside, but internally as well. Kurdish migration from one country to another

has also challenged Kurdish regional homogeneity, as Saddam Hussein's campaigns against Iraqi Kurds and the later fighting in Iraq between the KDP and the PUK sent millions of Iraqi Kurds to other countries.[8] Those divisions would be critical in the saga of the OIR campaign against Daesh.

### Iraqi Kurds

While Iraqi Kurds once had relative autonomy under the Ottoman Empire, which divided Iraq into three provinces (or *vilayetes),* the creation of modern Iraq after World War I made the Kurds one of several minorities in a majority Arab state. Kurds rose in rebellion against initial British rule and then against the Hashemite monarchy that Britain established.[9] Such Kurdish independence efforts were beaten back, often with great violence, by successive Iraqi governments, reaching their crescendo under Saddam Hussein. But despite the Iraqi regime's effort to repel Kurdish political ambitions, there was little unity in Iraq's Kurdish community. Two power Kurdish families, the Talibani and the Barzani, have separated the Iraqi Kurds into warring groups that have fought each other even as they fought against Iraqi governments that deny them autonomy or statehood. Even while Saddam attacked Iraq's Kurdish population, the conflict between the Barzani and Talabani families was so deep that Barzani opened Erbil to Saddam's forces, allowing them to defeat the Talibani forces.[10] While the US brokered an end to the inter-Kurdish fighting and the two feuding families brokered a truce, the tensions continued.

The post-Saddam Iraqi regime granted limited Kurdish autonomy, and the former feuding parties of the Barzani family (the Kurdish Democratic Party) and the Talabani (Patriotic Union of Kurdistan) joined Iraqi politics. Part of that union allowed the Kurdish *Peshmerga* to grow to almost 190,000 troops, which became significant when the fight with Daesh began.[11] In a multitude of ways, Kurdish fighters were essential in turning back the Daesh tide, beginning at Kobane in 2014, and Kurds continued to fearlessly battle Daesh until its defeat. It is hard to imagine such a victory without Kurdish support.

### Syrian Kurds

Syria's Kurds live mostly in the northeast corner of the country, on the border with Turkey. Not surprisingly, many Syrian Kurds trace their origins to Turkey, where the Sheikh Said revolt of 1925 forced

thousands to flee to neighboring Syria.[12] Some Syrian Kurds got to the heights of Syrian political power, like Colonel Husni al Zaʿim, who toppled the existing government in March 1949 and whose elevation of fellow Kurd Muhsin al-Barazi to minister of the interior sparked rumors that Barazi was using Zaʿim to set up an independent Kurdish state.[13] Such fears reflected a long-standing view among Syrian Arabs that the Kurds were not a part of the Syrian political or social fabric, though Syrian Arabs also tended to differentiate between Kurds whose families lived in Syria for centuries and those who had come as refugees from Turkey.

Syrian Kurds began to organize politically in 1957 with the formation of the KDP of Syria, and the Syrian government immediately declared the party to be illegal. The ruling Assad family treated the Syrian Kurds harshly. Hafez Assad designated Syrian Kurds as "foreigners," meaning that they could not get government jobs, attend government schools, or receive care at government hospitals, essentially rendering them stateless.[14] Thus it was unsurprising that Syrian Kurds quickly joined the opposition forces against Assad as the Syrian civil war began in March 2011. However, not all Syrian Kurds agreed on the formation of the PYD, with a small Kurdish coalition under the patronage of Masoud Barzani of the Iraqi KRG forming an alternative, the Kurdish National Council, in October 2011.[15]

As the Syrian civil war escalated, then-Turkish Prime Minister Recip Tayyip Erdoğan tried to persuade Assad to negotiate with the insurgent groups, but after Assad refused, the Turkish regime began supporting some of the rebel movements. Assad countered by lifting the restrictions he had imposed on Syrian Kurds in the Adana Agreement of 1998.[16] The initial phases of the Syrian civil war saw the Assad regime in retreat as rebel groups gained territory, and thus in July 2012, the Assad leadership, under considerable pressure from a multitude of antiregime forces, pulled its troops from Syrian Kurdish regions. The retreat allowed for the formation of a semi-autonomous Kurdish-majority area known as the Autonomous Administration of North and East Syria, or "*Rojava*."[17]

## Background of OIR

In June 2014, a little-known figure who called himself "Abu Bakr al-Baghdadi"[18] announced the formation of the "Islamic Caliphate,"

which launched a devastating assault in Syria in the spring and summer of that year. As the Daesh forces invaded the northern and central parts of Iraq and the northeastern parts of Syria, their assaults took them into Kurdish territory. The attacks surprised the Kurdish forces, including the Peshmerga, which for all its reputation for combat ferocity, was unprepared initially to hold Daesh back. As Kenneth Pollack indicated, the Peshmerga were mostly equipped with light weapons, while Daesh fought with heavier weapons captured from the Iraqi military and thus had a firepower advantage.[19] Perhaps fortunately for most of the region's Kurdish population, Daesh attacked mostly in the fringes of the Kurdish areas, choosing to focus largely on the Yazidi populations, whom the jihadi Daesh regarded as heretics. As Daesh began to slaughter the Yazidi in Iraq in August 2014, the Obama administration, horrified at the massacres, committed to air strikes to turn back Daesh, though American power did not advance much beyond this mission.[20] The partial force commitment did not prevent the slaughter of over 5,000 Yazidi men and the enslavement of 5,000–7,000 Yazidi women and children.

OIR worked for effective governance in Iraq after the 2003 overthrow of Saddam Hussein. Iraqi state construction under British rule marginalized the Kurds, and that marginalization continued under post-colonial rule.[21] Yet challenges remained. For example, Iraq's Yazidi community, once relatively unified, began to split as some identified with the KDP, while others blamed the KDP for not stopping Daesh.[22] Another Daesh attack in Syria, however, would serve to unite rather than splinter.

The vast sweep of Daesh forces into Iraq and Syria ultimately persuaded the Obama administration to respond with something beyond limited airstrikes, and thus the Defense Department created the OIR task force in October 2014. OIR was unlike other American Middle East operations in that it focused both on Iraq and Syria, then in the throes of a devastating civil war that helped serve as the Daesh breeding grounds. The US had far less experience operating in Syria than it did in Iraq, but in both countries, the US had a potential advantage in the Kurdish militias that could be American partners. That was especially important, as while the US OIR plans for Iraq incorporated the Iraqi military, no such plans were possible for Syria, as the Syrian army was engaged in the violent suppression of antiAssad militias, some of which got support from the US. But for OIR, one of the most significant challenges was how to incorporate Kurdish forces into the

overall campaign to defeat Daesh without jeopardizing the necessary cooperation that OIR needed from Turkey and Iraq.

OIR's mission was to first contain Daesh and then to degrade it through attrition, referred to as "aggressive containment."[23] Viable definitions of "aggressive containment" are illusive, though the term implied that the desired end state was a temporary halt to aggression, while a secondary end state was to defeat aggression at its source. While aggressive containment is relatively popular as a policy in the US, as it is promised to minimize coalition casualties, it had its limitations. As it did not directly attack the core of the opponent, it allowed that opponent to build a polity within the area it controlled, with relatively few challenges.[24] Moreover, as Jodok Troy notes, "the transferability of containment [was] framed as a limited strategy and part of a broader effort to halt the expansion of ISIS but not to defeat or eliminate it."[25]

## OIR and the Kurds Join Forces

OIR was always intended to be a coalition force, dependent on the militaries and militias in the region, as reflected in its motto, "One Mission, Many Nations." But any operation that calls for attrition of an enemy requires a combination of forces, air, and ground and is usually supported by seaborne forces. After years of American involvement in wars in Afghanistan and Iraq, public and political resistance to a large American ground contingent was high, and thus American planners intended that the ground elements come largely from regional forces. Planners also recognized that the bulk of the forces should come from the Sunni populations, as there were serious reservations about including Shia forces in OIR. Yet some Sunni forces defected to Daesh in both Iraq and Syria, and thus OIR relied more on Shia militias, along with Kurdish and Turkish forces and Russian airpower.[26]

A fundamental part of OIR was to continue the work for effective governance in Iraq that began in 2003 after the overthrow of Saddam Hussein. As a part of OIR, the State Department prevailed upon then-Prime Minister Haider al-Abadi to remove Iraqi government security forces from Salah al-Din province (the Kurdish-majority region) and to turn security over to the Peshmerga.[27] But the defeat of Daesh raised the specter that the briefly unified forces under OIR

would begin to dissolve as the threat lessened. Some Shia militias, such as Kata'ib Hezbollah, ceased working with the OIR coalition, thus in July 2019, Iraq's prime minister issued an order that "all Popular Mobilization Forces are to operate as an indivisible part of the armed forces and be subject the same regulations," by 30 July 2019.[28] While such an order was unlikely to influence the Shia militias, it did integrate the Peshmerga into the Iraqi state military.

Yet challenges remained. For example, Iraq's Yazidi community, once relatively unified, began to split as some identified with the KDP, while others blamed the KDP for not stopping Daesh. [29] But the larger obstacle was Turkey. Turkish security policy focused extensively on not only the PKK in Turkey, but also on PKK and affiliated Kurdish groups in neighboring countries. Iraq was one of those countries. Although Turkey benefited from Saddam Hussein's harsh treatment of Iraq's Kurds, those benefits ended with his 2003 overthrow. Ankara realized that the US employment of Peshmerga forces to end Saddam's influence in northern Iraq also liberated them from what remained of the Iraqi state. So Turkish special forces troops moved into northern Iraq, first in July 2003, which unfortunately led to their arrest and detention by US military forces, described by a Turkish general as "the worst crisis in confidence" in US-Turkish relations since Turkey joined NATO.[30] Continuing Turkish fears that Iraqi Kurds were affiliated with the PKK led to another Turkish incursion into northern Iraq in September 2015. Turkish authorities claimed that they were chasing PKK insurgents who fled into Iraq after a terrorist bombing in Turkey. However, PKK forces in Iraq had partnered with Iraqi Kurdish militias to fight Daesh, and, to his critics, Erdoğan was only hurting the anti-Daesh cause: "Turkey could not have helped Daesh more if it had tried," said Nazmi Gur, a former legislator who directs Turkey's pro-Kurdish party's foreign relations.[31] Such incursions would continue, as Turkish military power again reached over 200 km into that country to battle the PKK and PKK-associated Kurdish forces in August 2020.[32]

Turkey launched aerial drone attacks in Kurdish areas of Iraq, striking from Turkish military bases in the northern part of the country. While the strikes did not really affect the fighters in the area, they not only killed civilians, but they also sowed division between the PKK and the KRG and the dominant forces within the KRG, the KDP. KDP forces guarded Turkish bases in Iraq, according to one story, thus enabling Turkish attacks against the PKK.[33] A similar attack in

June 2020 targeted over 80 alleged PKK sites over northern Iraq, but while the Iraqi government and the Arab League protested, the Kurdish Regional Government responded only with silence.[34] The difficulties of incorporating Kurdish forces in Iraq continued, but in Syria, those difficulties were probably worse than in Iraq.

Thus, when Daesh carried out a surprise attack on the Syrian town of Kobani on the Turkish Syrian border in October 2014, it struck a mostly Kurdish controlled area. The attack galvanized and unified other Kurds into action. Not only did the YPG and the Woman's Protective Units join forces, but Kurds from other regions joined the fight. According to Barkey, the Kurdish Union Party and its militia wing the YPG were the most effective fighting force against Daesh.[35] They were joined by Iraqi Peshmerga fighters who traveled to Kobani. Turkey reluctantly allowed these Iraqi Kurdish fighters to use Turkish territory to cross into Syria.[36]

The Obama administration authorized US bombing strikes to defend Kobani and the airdropping of supplies to YPG forces on the ground.[37] Obama was reluctant to support the YPG but was also hesitant to place US forces on the ground in Syria, as his administration was burdened with a large US presence in Afghanistan and a smaller one in Iraq. Thus, the Obama administration searched for indigenous forces to support. Turkey offered an alternative Sunni force, but the US feared that the forces contained some jihadi troop and thus turned Turkey's offer down. So, in one sense, American support for the YPG was the result of a lack of other viable choices for containing and defeating Daesh.[38] As Tol and Taşpinar put it:

> The US decision in 2014 to airdrop weapons to the Syrian Kurdish People's Protection Units (YPG), considered to be a PKK-affiliated terrorist organization by Turkey, proved to be a turning point in Turkey-US ties. From the US perspective, the US action came after months of failed efforts to convince the Turks to do more in the fight against . . . ISIS. President Barack Obama's administration grew increasingly frustrated over Turkey's turning a blind eye to ISIS's activities within its borders. To Washington, supporting the YPG's fight against ISIS in the northern Syrian town of Kobane became a necessity. Ankara, for its part, felt betrayed by its NATO ally's decision to arm its arch-enemy.[39]

American OIR planners understood from the outset that choosing which anti-Daesh force to support posed a serious quandary. Ulti-

mately, the OIR staff recommended that the US provide support to the SDF militia and its fighting force, the YPG, a coalition of Kurdish and Arab militias formed in 2015. Not only were the YPG deemed effective fighters, but Turkey's decision to allow jihadi forces to cross its border into Syria to attack in Kobane also helped the Obama administration justify its support for them.[40]

Thus, a July 2015 briefing by Brigadier General Kevin J. Killea, chief of staff, Combined Joint Task Force-OIR, reflected this position: "The first question is about who we are supporting on the ground in northern Syria, and it's clear that the coalition forces are supporting anti-ISIL forces that are credible, reliable partners for us in the fight against ISIL. And that includes Syrian Kurds, it includes Sunni-Arab fighters, and it includes the moderate opposition forces from Syria, many of whom we've vetted, so those are called vetted Syrian opposition."[41]

After driving Daesh out of Kobane, the YPG and its non-Kurdish allies agreed to declare the Autonomous Administration of North and East Syria (Rojava) in March 2016. The agreement quickly drew denunciations from both the Syrian regime and some of its opposition, along with Turkey, Iran, and the United States.[42] Yet there was little that the opponents could do. Turkey tried bombing areas in the newly declared Kurdish region, and Syrian forces briefly engaged the Kurds there, but neither force succeeded.[43] In August 2016, Turkey launched Operation Euphrates Shield, sending forces across the Turkish-Syrian border, claiming to be both fighting Daesh and denying the PKK a safe territory. In six months, Euphrates Shield brought over 2,000 square kilometers under Turkish control, taking the strategic towns of Al-Bab, Jarablus, and Dabiq from Daesh and holding them to prevent the PKK/YPG forces from using the area.[44] During its involvement in northern Syria under Euphrates Shield, Turkey engaged in some policies that appeared to incorporate the region into Turkey, placing the territory under the de facto control of the governor of Gaziantep and the Ministry of the Interior, and bringing religious affairs under the control of the *Diyanet* or Ministry of Religious Affairs.[45] Thus while Turkish forces ended Euphrates Shield a year after it commenced, Turkish policy implied a longer-term interest and possible reoccupation. That happened in 2018 as Turkey mounted "Operation Olive Branch," which was specifically targeted against the YPG in the Afrin region. While Olive Branch was almost exclusively

a military operation, some suggested that it was also intended to deter the US from continuing its support of YPG.[46]

Nevertheless, the SDF-led coalition forces pushed Daesh back militarily in Syria, finally cornering the remnants at Baghuz, in March 2019. They seized the last remnant of the Daesh territory, once the geographical size of Great Britain. However, the SDF forces knew that taking towns and cities back from Daesh did not eliminate its threat, as one SDF commander noted, "When we go to the front lines, we face them. We shoot them, they shoot back. We know who is in front of us," he added. "But behind us are sleeper cells. The fight against the enemy you cannot see is much harder."[47] And while smaller-scale fighting continued throughout the rest of the year and the SDF set up temporary prisons to house their Daesh captives, they did not expect a new challenge to arise, this one from the United States.

With large swaths of Syria under its sway, Kurdish forces proceeded to create a small statelet in northwest Syria. The Kurds there were ostensibly Syrian Kurds, but Turkey worried that the group was hosting members of the PKK, training and arming them to return to Turkey and fight. While Turkey and the YPG had similar objectives in Syria, defeating Daesh, the YPG's ties to the PKK were more concerning for Turkey. Turkey also worried that American forces were protecting these forces as a part of OIR. Those American forces, numbering somewhere between 50 and 100, served as a sort of tripwire to keep Turkish forces out of northern Syria, thus protecting the Kurdish troops there.[48] So President Erdoğan called President Trump on 6 October 2019, demanding that he order the withdrawal of American forces from northern Syria.

Trump's national security advisor team and senior military leaders strongly protested the demand, arguing, among other points, that Trump's narrow goal of defeating Daesh missed the broader objectives in the region.[49] Nevertheless, the Trump administration unexpectedly announced the withdrawal of US forces from northern Syria, a decision that provoked warnings from several US military agencies. The Defense Intelligence Agency stated that the withdrawal "will provide the group with time and space to expand its ability to conduct transnational attacks targeting the West."[50] Pushing the limits of civilian control of the armed forces, the US military denounced the move. Republican members of Congress also pushed back against the decision, concerned that the US was abandoning the most effective forces in Syria fighting against Daesh.

Whether or not President Trump understood the consequences of his withdrawal decision is unclear, but it appeared that the criticism caused him to rethink his plan, so even as some US forces left the area, others entered, but they were stationed closer to the oil-producing areas in Syria, between Hasakah south to Deir al-Zour, farther from the Turkish border.[51] Turkey, apparently encouraged by the initial withdrawal, started air attacks against the Kurdish troops there on 9 October, and then the next day, Turkish ground forces streamed across the border.[52] As the SDF had built temporary prisons and camps for the Daesh members they captured, the Turkish assault had dire consequences, as hundreds, and possibly thousands, of Daesh prisoners escaped from the camps that the SDF operated.

The decision was both controversial and poorly explained by the Trump administration. Noted Henri Barkey, "Erdoğan convinced him (Trump) that Turkey would take care of the situation," though as Barkey noted, Turkey was really pursuing its own interests.[53] Erdoğan was also challenging the PKK in northern Iraq, taking Turkish forces as far as 200 km into that country to battle the PKK and PKK-associated Kurdish forces.[54]

In a blandly worded report, the CENTCOM Inspector General reported in November 2019 that "On October 9, Turkey launched air and ground operations against Kurdish People's Protection Unit (YPG) positions in northeastern Syria. These actions influenced the US relationship with the Kurds and the Syrian Democratic Forces (SDF) in Syria, and control of territory in northeastern Syria."[55] According to a US report, Turkish-supported forces engaged in "arbitrary detentions, extrajudicial killings, seizure of and resettlement of new populations in private properties, the repeated and deliberate shutting off water access to half a million civilians, and transfer of arbitrarily detained Syrians across an international border into Turkey."[56] Seeing the US abandon it, and under assault from Turkish forces, the YPG decided to make a pact with the Syrian regime forces in northern Syria to fight Turkey and the proxy forces that Turkey used, including some reported jihadi fighters.[57]

Still, the US continued to provide assistance to the YPG, a fact that caused considerable ire in Turkey. In October 2020, the Turkish press complained that the US transferred over $400 million in equipment to the YPG, even after American officials stated, "None of this funding will be provided to security forces," saying that it was all, "humanitarian assistance" that will be distributed to Syrians by "trusted partners

on the ground."[58] But Turkey countered that the US had promised to halt weapons delivery to the YPG in early 2018 during a phone call between Ibrahim Kalin, spokesman for President Erdoğan, and then-US National Security Advisor H.R. McMaster.[59]

As the US withdrew its influence and forces from northern Syria, Russia quickly moved into the region to fill the vacuum. Russian forces patrolled the northeast of Syria, doing joint operations with Turkish forces and deconflicting between the Turkish and SDF forces.[60] The SDF found itself forced to shift its ties from the United States to Russia, thus aligning with the Assad regime that Russia supported. That arrangement allowed Syrian forces to return to the northern part of Syria to fight Turkish forces that had moved in after the Trump announcement.[61]

The Kurdish units in Syria continued to fight the remnants of Daesh into 2020, even though those remnants were small and scattered. For example, the YPG, assisted by Arab and Syriac Christian units along with US Special Operations forces, carried out a raid on a Syrian village east of Deir ez-Zor province and rounded up three Daesh suspects (two blew themselves up) in May 2020.[62] OIR forces and the SDF also continued combat operations to try and secure Daesh prison areas, as well as striking Daesh training camps in the Badiyah Desert region of Syria in October 2020.[63] But for the most part, OIR forces shifted emphasis from combat operations to training, advising, and assisting both the Iraqi security forces and the SDF, as well as to facilitate regional economic development.[64] OIR forces and SDF launched projects that improved regional agriculture, electricity delivery, and medical responses to fight regional Covid-19 outbreaks.[65]

The increasingly stronger Kurdish presence in northern Syria did raise concerns that one of their objectives was to partition Syria, creating a Syrian Kurdistan there. YPG statements tried to alleviate such concerns, with YPG spokesperson Aymenn Al-Tamimi stating in an interview that "We don't want to partition Syria. And we don't want to draw new borders . . . but we want Al-Shaam [Syria] to be democratic."[66]

## Conclusions

OIR was unique in that it included the nonstate actor Kurdish militias in its coalition forces. America has quietly supported nonstate

actors previously, as when American assistance went to Hmong and other ethnic groups fighting in the Vietnam War or covert support to Tibetans during the early Cold War. However, US OIR policy formally included Kurdish forces in the coalition, with its list of "in support of" actors including the KRG and the Autonomous Administration of North and East Syria (Rojava). While the YPG was not included in the formal list, OIR was clearly supporting its forces. The complexity of this arrangement was the Kurdish groups' relationship with their host country. American OIR planners found the Kurds to be effective fighters once they overcame the original Daesh assault. Kurdish militias were also loyal to the OIR program, with almost no defections nor demands for side payments to remain in the coalition. "Aggressive containment" did work, at least in defeating the main Daesh force, with few American ground combat troops, and the robust participation by Kurdish militias. The future of Daesh is another story, as while OIR has tried to build effective governance in Iraq (with mixed results), the ongoing Syrian civil war remains a breeding ground for future Daesh growth.

The other factor that emerges from this analysis is the tensions between states and nonstate actors. OIR focused on joining nonstate and state actors in a coalition against a nonstate actor, Daesh. The apparent OIR hope was that the Daesh threat to states was so serious that the unwieldy coalition would survive the long-standing fear and animosity between both Turkey and Iraq and the nonstate Kurdish groups that OIR incorporated into the anti-Daesh mix. In the end, though, states prevailed. Even the SDF had to join the broken state of Syria after Turkish forces swarmed into its newly acquired Syrian territory. Even the horror of Daesh could not gain the Kurds relative autonomy, nor a reprieve from the Turkish state that viewed the Kurds as an existential threat, despite Turkish claims that only the PKK was the enemy. Yet even though the Kurdish participants did not, in the end, gain a political advantage from OIR, they were an essential part of the overall coalition in defeating Daesh. That they have been marginalized by the US may only contribute to their desire to go it alone, which is perhaps even more likely after the US evacuation of Afghanistan. The Kurds must be asking if the US leaves a state partner it tried to support for 20 years, what future is there for American support of a nonstate partner?

## Notes

1. The author appreciates helpful comments from Christopher Hemmer and Col Wayne Straw, USAF.

2. The "Islamic State is *ad-Dawlah al-Islāmiyah*, which is where the term "Daesh" comes from. Many prefer Daesh as they argue that the beliefs and practices of the so-called "Islamic State" were very incompatible with the fundamentals of Islam as contained in the Quran and the teachings of the Prophet Mohammed. My use of Daesh signifies my agreement with that position.

3. Michael Gunter, "Kurdish Disunity in Historical Perspective," *The Journal of Diplomacy and International Relations,* 18 June 2018, 30.

4. "The Time of the Kurds," Council on Foreign Relations, n.d.

5. The Yazidi are Kurdish speakers but practice a syncretic religion that draws from Zoroastrian tradition, Islam, Judaism, and Nestorian Christianity. Their divine being is sometimes confused with Satan, causing some to claim that they are devil worshipers. They have been persecuted for many centuries, mostly by Muslim rulers.

6. Abbas Vali, "The Kurds and their 'Others': Fragmented Identity and Fragmented Politics," in *The Kurds: Nationalism and Politics*, ed. Faleh A. Jabar and Hosham Dawod (London: Saqi, 2006), 49–78.

7. Hakan Özoğlu, *Kurdish Noteables and the Ottoman State: Evolving Identities, Competing Loyalties, and Shifting Boundaries* (Albany: State University of New York Press, 2004)*,* Chap. 1-2; Denise Natali, *The Kurds and the State: Evolving National Identity in Iraq, Turkey, and Iran*, (Syracuse, NY: Syracuse University Press, 2005.)

8. Bahar Baser and Mari Toivanen, "The Politics of Genocide Recognition: Kurdish Nation Building and Commemoration in the Post-Saddam Era," *Journal of Genocide Research* 19 no. 3 (2017): 404–26.

9. Charles Tripp, *A History of Iraq* (Cambridge: Cambridge University Press, 2000), chap 2.

10. Joost Hiltermann, "The Kurds: A Divided Future?," International Crisis Group, 19 May 2016, https://www.crisisgroup.org/.

11. Johannes Jüde, "Contesting Borders: The Formation of Iraqi Kurdistan's de facto State," *International Affairs*, 93, no. 4 (July 2017): 847–63.

12. Carter Vaughn Findley, *Turkey, Islam, Nationalism, and Modernity: A History* (New Haven, CT: Yale University Press, 2010), 250–51; and Mohanned Al-Kati, "The Kurdish Movement in the Arab World: The Syrian Kurds as a Case Study," *Al-Muntaqa* 2, no. 1 (April/May 2019): 45–61.

13. Patrick Seale, *The Struggle for Syria: A Study of Post-War Arab Politics, 1945–1958* (New Haven, CT: Yale University Press, 1965), 60.

14. Henry J. Barkey (adjunct senior fellow for Middle East studies at CFR), conference call with Irina K. Faskianos, video, 59 min., "The Future of the Kurds in Syria," Council on Foreign Relations, 14 November 2019: https://www.cfr.org/.

15. "Syria's Kurds: A Struggle within a Struggle," International Crisis Group Report 136, 22 January 2013, https://www.crisisgroup.org/.

16. Michael M. Gunter and M. Hakan Yavuz, "The October 2019 Turkish Incursion into Kurdish Syria: Its Background & Broader Implications," *Middle East Policy* 27, no.1 *(*Spring 2020): 86–101.

17. Michael M. Gunter, "Iraq, Syria, ISIS, and the Kurds: Geostrategic Concerns for the U.S. and Turkey," *Middle East Policy* 22, no. 1 (Spring 2015): 102–11.

18. His real name was Ibrahim Awad Ibrahim Ali al-Badri. He purposefully adopted the name of the first Caliph, Abu Bakr, the Prophet's father-in-law, and "al-Baghdadi" to signify that he was from Baghdad, the old capital of the Abbasid Caliphate. That latter identity was false, as he was actually born in Samarra.

19. Kenneth M. Pollack, "Iraq: Understanding the ISIS Offensive against the Kurds," Brookings Institution, 11 August 2014, https://www.brookings.edu/.

20. Pollack.

21. Natali, Chap. 2–3.

22. "Divided, Oppressed, and Abandoned," *The Economist*, 12 December 2020, 50–51.

23. Alexander Ohlers, "*Operation Inherent Resolve* and the Islamic State: Assessing 'Aggressive Containment,'" *Orbis* 62, no. 2 (2017): 195–211.

24. Ohlers, 196.

25. Jodok Troy, "The Containment of the Islamic State: A Realist Case to Engage a Hybrid Actor," *Contemporary Security Policy*, 41 (2020): 385–406. See also J. Dobbins and S. G. Jones, "The End of a Caliphate," *Survival* 59, no. 3 (2017): 55–72.

26. Ohlers, 202–3. Ohlers separates out "Sunni" from "Kurdish," but the large majority of the Kurds are Sunni. It would have been clearer to have said "Arab Sunni."

27. Lead Inspector General for Overseas Contingency Operations, *Operation Inherent Resolve: Quarterly Report and Biannual Report to the United States Congress December 17, 2014–March 31, 2015*, 22.

28. CJTF-OIR Public Affairs, "CJTF-OIR Reflects on Significant Gains in 2019," US Central Command, 9 February 2020, https://www.centcom.mil/.

29. "Divided, Oppressed, and Abandoned," *The Economist*, 12 December 2020, 50–51.

30. Michael M. Gunter, "Why Kurdish Statehood is Unlikely," *Middle East Policy* 11, no. 1 (Spring 2004): 106–31.

31. Suzan Fraser, "Turkey Sends Troops into Northern Iraq, Pursuing Kurdish Rebels," *Christian Science Monitor*, 8 September 2015, https://www.csmonitor.com/.

32. "Ottoman Redux," *The Economist*, August 1, 2020.

33. Sylvain Mercadier, "'They Destroyed Our Life:' Iraqi Kurds Fear Turkish Drones in PKK Mountain War," *Middle East Eye,* 17 November 2020*,* https://www.middleeasteye.net/.

34. Bethan McKernan, "Turkey Launches Major Attack on Kurdish Militants in Iraq," *The Guardian*, 17 June 2020, https://www.theguardian.com/.

35. Henri Barkey, "Kurds are Now Key to a Middle East Solution," *Financial Times*, 25 February 2016, https://www.ft.com/. See also E. Fuyat Keyman, "Turkish Foreign Policy in the Post-Arab Spring Era: from Proactive to Buffer State," *Third World Quarterly* 37, no. 12 (2016): 2274–2287.

36. Zeynep Kaya and Matthew Whiting, "Sowing Division: Kurds in the Syrian War," *Middle East Policy* 24, no. 1 (Spring 2017): 79–91, https://doi.org/10.1111/mepo.12253.

37. Amanda Sloat, "The US Played down Turkey's Concern about Syrian Kurdish Forces. That Couldn't Last," The Brookings Institute, 9 October 2019, https://www.brookings.edu/.

38. Sloat.

39. Gönül Tol and Ömer Taşpınar, "Turkey's Russian Roulette" in *The MENA Region: Great Power Competition*, eds. Karim Mezran and Arturo Varvelli. (Milan, IT: The Atlantic Council, 2019), 107–25.

40. Ersa Gürçay, "The U.S.-YPG Relationship: U.S. Foreign Policy and the Future of Kurds in Syria and Turkey," Middle East Policy Council, 2020, https://mepc.org/.

41. "Department of Defense Press Briefing with Brigadier General Kevin J. Killea, chief of staff, Combined Joint Task Force-Operation Inherent Resolve via DVIDS from Southwest Asia on Operation Inherent Resolve," 21 July 2015, https://www.defense.gov/.

42. Franco Galdini and Davide Vignati, "Kurdish Disunity on the Front Lines of Syria's war," *The New Arab*, 25 August 2016, https://english.alaraby.co.uk/.

43. Galdini and Vignati.

44. "Turkey 'Ends' Euphrates Shield Campaign in Syria," *BBC*, 30 March 2017, https://www.bbc.com/.

45. Aaron Stein, Hossam Abouzahr, and Rao Komar, "Post Conflict Stabilization: Turkey and the End of Operation Euphrates Shield," Atlantic Council, 13 July 2017, https://www.atlanticcouncil.org/.

46. Metin Gurcan, "Operations Euphrates Shield and Olive Branch: Assessing the Post-July 15 Turkish Military," Washington Institute for Near East Policy, 2019.

47. Rukmini Callimachi, "ISIS Caliphate Crumbles as Last Village in Syria Falls," *New York Times*, 23 March 2019, https://www.nytimes.com/.

48. Trump seemed to have second thoughts about the pullout after sharp criticism from Republican Senators in particular. He commented that "if Turkey does anything that I, in my great and unmatched wisdom, consider to be off limits, I will totally destroy and obliterate the Economy of Turkey." Turkey was clearly unmoved by the unusual comment. Karen DeYoung, Missy Ryan, Kareem Fahim, and Sarah Dadouch, "Republicans Assail Trump's Decision to Pull Troops from Northern Syria as Turkey Readies Offensive," *Washington Post*, 8 October 2019.

49. Mark Landler, Helene Cooper, and Eric Schmitt, "Trump to Withdraw U.S. Forces from Syria, Declaring 'We Have Won against ISIS,' " *New York Times,* 19 December 2018*,* https://www.nytimes.com/.

50. "Pentagon Watchdog: US Withdrawal in Syria Damaged Kurdish Partnership, Hurt ISIS Fight," The Hill, 19 November 2019, https://thehill.com/.

51. That move made it easier for U.S. opponents, including Russia, which supported the Assad regime, to denounce American objectives as "imperialistic," with a Russian Ministry of Defense spokesperson claiming that "What Washington is doing now, the seizure and control of oil fields in eastern Syria under its armed control, is, quite simply, international state banditry." Dan Lamothe, "U.S. Military begins Bolstering Troops Numbers in Syrian Oil Field Region, Defense Officials Say," *Washington Post*, 26 October 2019, https://www.washingtonpost.com/.

52. Eric Schmitt and Helene Cooper, "Hundreds of U.S. Troops Leaving, but also Arriving in Syria," *New York Times*, 30 October 2019, https://www.nytimes.com/.

53. Gürçay, "The U.S.-YPG Relationship."

54. "Ottoman Redux," *The Economist*.

55. Department of Defense Office of Inspector General, *Lead Inspector General for Operation Inherent Resolve Quarterly Report to the United States Congress July 1, 2019–October 25, 2019*, 15 November 2019, https://www.dodig.mil/.

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57. Shawn Snow, "The End of an Era: 60,000-Strong U.S.-Trained YPG Partner Force Crumbles in a Week under Heavy Turkish Assault," *Military Times*, 14 October 2019, https://www.militarytimes.com/.

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60. "Syria Update, 27 November–3 December," Center for Operational Analysis and Research, 2019, https://coar-global.org/.

61. Ben Hubbard et al., "Abandoned by U.S. in Syria, Kurds Find New Ally in American Foe," *New York Times*, 23 October 2019, https://www.nytimes.com/.

62. Al-Monitor Staff, "Kurdish and Coalition Forces Target Islamic State in Eastern Syria," *Al-Monitor*, 7 May 2020, https://www.al-monitor.com/.

63. Col. Wayne Marotto, Operation Inherent Resolve Spokesperson, "CJTF-OIR Statement: Coalition Aircraft Destroyed Daesh Camps in Badiyah Desert, Syria," 4 October 2020, https://www.inherentresolve.mil/.

64. Terri Moon Cronk, "Focus Remains on Enduring Defeat of ISIS, Military Official Says," US Central Command, 23 January 2020, https://www.centcom.mil/.

65. US Central Command, "Transcript: Col Myles Caggins, CJTF-OIR Spokesperson, Holds a Press Conference with Syrian Democratic Forces," 30 July 2020, https://www.centcom.mil/.

66. Hana Hasan, "What is Behind the US' Support for the YPG?" *Middle East Monitor*, 30 January 2018, https://www.middleeastmonitor.com/.

# Russian Military Intervention in Syria

### Fighting International Terrorism, or
### Protecting a Client State?

*Andy Akin*

Shortly before New Year's Day 2018, Russian President Vladimir Putin presided over a reception and awards ceremony for veterans of the Syrian campaign in the Kremlin Palace's beautifully ornate St. George Hall. In addition to bestowing decorations for bravery and heroism on some of the returning service members, the Russian President glorified their duty, patriotism, and sacrifice. According to Putin, the deployment and operations in Syria were essential to Russia's national interests and essential to maintain national security and protect the Russian motherland.[1] While Putin's speech and the accompanying ritual and symbolism of honoring returning military heroes reflects centuries of custom and tradition, the Russian deployment to Syria reflects evolving and aspirational efforts of the Russian Federation to pursue its geopolitical interests.

The Russian state in all its iterations and revolutions maintains a complicated relationship with the Middle East and North Africa, with two dominant themes: first, an effort to expand the territorial holdings along the southern frontier of the Russian empire or sphere of influence, and second, to counter the colonial or expansionist aspirations of other states. Primarily, Russian concern over its border regions and, by extension, the Middle East is security related. Whether contesting the British over access to Central Asia during the nineteenth century's "Great Game" or denying the opportunity for people and weapons to transgress the Northern Caucasus to the Middle East in the last hundred years, the intrinsic concern of the Russian state in Middle Eastern affairs reflected the security and stability concerns of tsars, general secretaries, and presidents.

More recently, the 2015 Russian National Security Strategy (NSS) identifies two factors leading to the Russian intervention in Syria. First, a veiled reference to the United States's practice of "regime change" is seen as inherently destabilizing and threatening to Russian security interests. Russia intimates a moral imperative to defend allies

and partner regimes from such a fate. Second, the Islamic State is specifically referenced as a concern for Russian security and an outcome of other states' failed security policies.[2] Consequently, the Russian NSS gave notice that the Russian Federation viewed the political and security situation in Syria in 2015 as a legitimate threat to its interests because the Bashar al-Assad regime (seen as legitimate) was in danger of being deposed. The rise of the Islamic State threatened the Syrian government (a client state of Russia's) and posed a threat to Russia itself.

Acting on these concerns, President Putin ordered Russian forces to begin strikes in Syria at the end of September 2015. The initial attacks by Russian forces concentrated on Assad's greatest challengers to keep his regime in power and avoid an additional power vacuum and humanitarian crisis in the region after the more recent situation in Libya. After the initial wave, Russian forces targeted both antigovernment rebels and ISIS camps, depots, and formations.[3]

Russian operations in Syria demonstrated enhanced weapons and technology platforms which resulted in more effective outcomes than witnesses report from their incursions in places like Georgia a decade prior. Putin's efforts at military modernization policies yielded a more effective combat force. Despite these efforts, Russian operations still resulted in loss of their aircraft, crew, and other assets. While defeating ISIS as a threat to the Assad regime was the greatest single motivator of the intervention, Putin eyed antigovernment rebels with an array of connections to the United States as equally threatening to his client state and, consequently, to Russian national interests.

While Russian efforts to defend the Assad regime were successful and a shaky international coalition defeated ISIS, the long-term prospects of both stability in Syria and Russia's commitment to the regime and the region are unclear. The intervention demonstrated Russia's ability to project power through military action beyond its border regions and the ability to credibly act to negotiate and broker power agreements with partner and allied states. The Russians will have to maintain a certain level of force posture in Syria; both naval and air forces expect long term deployments there. The contemporary situation illustrates a fundamental problem with Russian military and political power extending beyond the traditional area of operations to address a changing security environment. Russia's ability to conduct limited military operations is apparent, less so is its willingness to bear the costs of long term, sustained deployment of forces for un-

certain security payoffs. While this is the most recent development in Russian engagement with the Middle East, a long history led to this moment.

## Russian History in the Middle East and Syria

The Russian Empire, the Soviet Union, and the Russian Federation's engagement in the Middle East and North Africa reflected the strategic interests of the Russian state and its relative power at the time. For Russia, the region is commonly divided into the northern countries, Turkey and Iran, and the rest of the region—the Arab states. Turkey and Iran share substantial land borders with either former territory of the Russian Empire, the Soviet Union, or post-Soviet states still considered within Russia's sphere of influence.[4] Further, the substantial Muslim populations in Central Asian states remain a long-standing issue of concern to Moscow for the issue of influence of Middle Eastern states and the exportation of extremist ideology and virulent fundamentalism.

During Russia's age of late imperialism, the Tsar's emissaries primarily engaged with Turkey and Persia owing to shared borders and competing territorial claims with European colonial expansion.[5] Russian involvement in the Middle East until World War I was characterized by inconsistent engagement with Arab, Turkish, and Persian capitals and viewing the region primarily as a chessboard during the "Great Game" following the Russian accession into the Concert of Europe. The decades following the Russian Revolution of 1917 witnessed a notable change toward the Middle East in foreign policy. The Soviets vacillated between an ideological pursuit of international communism and anti-colonialism with states in the Middle East and North Africa and a practical interest in selling weapons and gaining alliances against western-backed states in the region.[6]

In the immediate wake of the Russian Revolution, the Bolsheviks faced a myriad of urgent domestic threats and crises, forcing a period of reconciliation with formerly hostile states to concentrate on internal affairs. Vladimir Lenin oversaw the First World War, the Russian Civil War, and massive social and economic disruption as he endeavored to create the Soviet institutions. Lenin's successor, Joseph Stalin, managed the Soviet state through World War II and beyond, overseeing a massive expansion of state authority, control, and foreign affairs.

Stalin pursued Soviet foreign policy outside of the immediate territories of Soviet influence with an ideological intent. Frequently described as "two-camp theory," in which a foreign state was either socialist or capitalist, socialist states were to be embraced and supported while capitalist states were to be targets of revolution.[7] World War II extracted extraordinary costs from the Soviets, and the economic costs to recover from the war prevented the Soviet state from fully supporting a cohesive and consistent foreign policy aimed at exporting revolution during Stalin's tenure.[8]

A significant shift in Soviet relations with the broader Middle East began after Nikita Khrushchev's installation as Soviet premier. Both arms sales and direct loans went to several Middle Eastern states, with Egypt as the premier example. The Soviets funded the massive dam project at Aswan, signifying a new era in relations between Arab states and the USSR.[9] Khrushchev also pursued an intent to export and support Communist parties abroad beginning early in his tenure. His efforts met with mixed success, however, as many Arab states were willing to purchase Soviet arms and eager for infrastructure loans, but several outlawed the formation of Communist parties, including Syria.[10]

The most tenuous issue involving the Soviet relationship with the Arab world during this time was the 1967 Six Day War. Both Egypt and Syria received arms transfers from the Soviet Union in the years preceding the Six Day War; both remained behind on promises to fully remunerate the Soviets for the weapons. Further, a series of coups in Syria between 1961 and 1966 complicated relations between Damascus and Moscow over how Communist party members and sympathizers in Syria would be treated in Damascus's support for guerilla campaigns against Israel.[11] The Soviets became increasingly concerned about the possibility of military conflict between Israel, supported militarily and politically by the United States, and Egypt and Syria, among other Gulf States, which carried with it the possibility of dragging the Soviet Union into the conflict. Moscow warned repeatedly against involvement in an "imperialist conflict."[12]

Most significant during this era was a series of diplomatic messages between Moscow, Cairo, and Damascus relaying questionable intelligence and analysis of Israeli intent. Consequently, and a further result of the routing the Arab militaries experienced during the Six Day War, relations between the Soviet Union and the "Southern States" in the Middle East deteriorated further.[13]

The final years of the Soviet Union and the early era of the Russian Federation's Middle East policy were constrained by both a lack of resources to devote to the region and higher priorities elsewhere. Without question, the Russian Federation seeks recognition as a great power. The inherent problem with that premise is that Russia remains a weak state and will be for the near future. To disrupt the current international order, Russia pursues a strategy of de-legitimizing the US-led liberal international system for a "polycentric world order."[14] Beyond the former Soviet states, the Middle East lies closest to Russia geographically and carries strategic significance to Moscow. Consequently, developments in Middle East regional politics are of special concern to Russia, because of the Arab Spring, Syrian civil war, refugee flows, the unique position of Turkey vis à vis the West, and potential buyers for Russian weapons. Given the Middle East's proximity to Russia, the Russian Federation's efforts to project power and become a regional power broker make sense. The questions that emerge from the last 5–7 years and how Russia is positioned going forward are of particular interest. Will Syria become a strategic quagmire, siphoning resources from Russia? Or will Syria demonstrate Russia's ability to project strategic power from its traditional territory? If Russia can pacify Syria, it demonstrates to the world new capacity as a power broker. That could translate into a wide customer base for the Russian defense industry and recognition of the international community that Russia possesses the capability to pursue its own interests outside of the post-Soviet space.

## Russian National Security and the Middle East

An intersection of complex dynamics explains the Russian Federation's deployment to Syria. A myriad of overlapping concerns influenced Vladimir Putin to order Russian naval, air, and ground forces to support the Assad regime. The "low hanging fruits" for Russian intervention included ensuring arms sales and energy deals with Syria would continue, as well as unimpeded access to the port at Tartus. While there is merit to those claims, none are sufficient to require the degree of military operations and expense outlaid for the Syrian operations. Rather, Syria became the bulwark and symbol of new Russian strategic thinking and concern. Deeply concerned over the potential for the contagion effects of popular unrest toward authoritarian

leadership during the Arab Spring to spill over into the predominantly Muslim Central Asia Republics, and even to Russia itself, and with the intent to demonstrate Russia's military capability to the world, Russian intervention aimed to not only preserve the regime of a long time client state but also to demonstrate its intent to challenge the US's and western world's ability to dictate regime change and political outcomes at will.

Beyond concern about the US exercising force to change regimes, domestic unrest near Russia's borders raised suspicion in Moscow. A mass protest erupted in the former Soviet Republic of Georgia following the contentious 2003 presidential election. Public opinion held that the elections were fraudulent, and Edward Shevardnadze (the once popular Soviet foreign minister) held office through illegitimate means.[15] The following year, Viktor Yushchenko defeated Kremlin backed Viktor Yanukovych to become president of Ukraine after weeks of public demonstrations succeeded in a second election, after claims of mass fraud surfaced and were verified.[16] The Rose revolution in Georgia and the Orange revolution in Ukraine were the first in a series of so named "colored revolutions" that spread through former Soviet states in the early to mid-2000s. They resulted in the ouster of former Soviet officials and a younger generation of independent and reform-minded leaders sweeping into office.

Further colored revolutions continued in states like Kyrgyzstan and Belarus. While the West looked upon the color revolutions with hope that popular autonomy and a surge of democracy was pushing back against a wave of authoritarianism emanating from Russia after post-communist democratizing efforts floundered, Russia viewed the demonstrations and resultant leadership changes as an existential security threat and orchestrated by international entities, particularly the United States.[17]

As a result, the Kremlin passed a series of laws inhibiting international organizations from freely operating in the Russian Federation and cracked down on domestic political dissent. The "Foreign Agent Registration Act" placed burdensome taxation and regulatory burdens on NGOs (non-governmental organizations) with active programs in Russia, including public disclosures, making them the targets of pro-Kremlin gangs, and severely limiting their activity.[18] While this policy appeased the Russian Orthodox Church, whose patriarch has developed a close relationship with Putin, an unsubtle goal of this policy was to prevent international funding for Muslims living within the

Russian Federation. Putin was determined to prevent funding from Saudi Arabia to create opportunities for Islamic political influence to achieve a critical mass in former Soviet states in Central Asia.[19]

When another wave of grassroots antiauthoritarianism, the so-called "Arab Spring," swept the Middle East and North Africa in the early 2010s, Putin acted overtly and aggressively to contain its effects. The Arab Spring movement had the potential to challenge Russian influence over old client states like Syria and Libya and enable further western, particularly US, intervention, outreach, and basing in a region where Russia was re-exerting power. Further, Putin and his military staff expressed dismay with the number and type of military interventions occurring within the Middle East and desired stable, consistent regimes.[20] In addition to the potential for unsettling regional stability, Russia fears Islamic extremists who could establish safe zones for recruiting, training, and infiltrating terrorists into areas like the Caucasus and Central Asia.[21] The combination of unsettled regimes and possible extremist hotspots influenced the Russian state to act.

## Russian Military Intervention

As 2015 wore on, the Assad regime faced increasing pressure from rebel groups to the extent that Assad's survival was at stake. By September, the Russian Federation unleashed an air campaign under the pretense of destroying ISIS fighters and preventing the spread of fundamentalist Islamic militarism to the former Soviet states of Central Asia. Instead, Russian forces pursued a military strategy with the intent of maintaining Assad's security as leader and demonstrating the ability to project power beyond the border states of the former Soviet Union. In executing their strategy, the Russian Federation exposed the reticence of the US-led western alliance about another Middle Eastern involvement and the weakness of the Western isolation and sanction efforts aimed at Russia to punish their annexation campaign in Ukraine.

The Russian military intervention in Syria was carefully planned, and the lead up to initiation of combat operations included construction and development of support infrastructure and a secretly negotiated memorandum of understanding for basing rights and immunity for Russian military personnel before the deployment began. With

the pieces in place, the Russians first moved to secure the survival of the Assad regime before turning their military assets loose on both ISIS fighters and support centers and the patchwork of antigovernment rebel groups holding territory. While successful in meeting most of their stated goals and political ends, the Russian intervention demonstrated improved technical capability and the considerable outlay of resources accompanying power projection in the Middle East.[22]

More than four years of fighting, significant changes in territorial control, and massive refugee flows finally pushed Moscow to act. The long history of Moscow and Damascus, combined with concerns in Moscow over losing a client state, the inability to continue arms sales, and the possibility of a safe territory that could act as a haven for terrorist groups to train and plan strikes threatening to the Russian homeland, finally spurred action. Further, Prime Minister (at the time) Putin and Foreign Minister Sergei Lavrov, foreign policy leaders, expressed a deep concern that US involvement in Syria could turn into another version of Libya and the ouster of Assad.[23]

Through the summer of 2015, Russian supply missions via the port at Tartus and the expansion of the airfield at Khmeimim, close to Latakia, foreshadowed deeper Russian military involvement.[24] Concurrently, anti-Assad rebels made sweeping territorial gains in the north while ISIS took territory from southern areas abandoned by Assad loyalists.[25] The increasingly dire security situation of Assad's regime prompted Moscow to initiate action to save its long-term patron state and weapons customer.[26]

During the lead up to September, the Assad regime and the Russian Federation jointly signed what may be described as a status of forces agreement, undisclosed to the public until January 2016. The details of the accord provided for Russian air and land forces to base and operate with near impunity. The agreement would take a full year to terminate and preceded a substantial and rapid infrastructure expansion and logistical build up at the Khmeimim airbase and port of Tartus.[27]

Between late September 2015 and August 2017, the Russian Federation executed major combat operations in Syria with the express purpose of eliminating and defeating the Islamic State. While ISIS represented a real threat to Russian interests, Russian air and land forces also assaulted with impunity the myriad resistance groups organized against the Assad regime. The Russian military reduced ISIS territorial gains, protected Assad, and managed a joint arms campaign in conjunction with a US-led coalition. While meeting the

stated political objectives of Russian leaders, the military campaign in Syria escalated tensions along Russia's periphery and illustrated that while Russia could field expeditionary air, land, and sea forces, the limits of Russian force projection and sustainment were also on display, marking an awkward message for client states.[28]

Russian military aircraft, maintenance crews, and other personnel arrived in droves in the port of Latakia and nearby Khmeimim airbase throughout the summer of 2015, the pace increasing rapidly following a secret pact between Russia and Syria in late August.[29] Sources vary on the exact number of aircraft and personnel, with aircraft estimates between 50 and 70.[30] In addition, 3,000 Russian ground troops and approximately 1,000 private military contractors supplemented the air assets with not only maintenance and logistical support but also special operations capabilities.[31]

The Russian military initiated operations in Syria on 30 September 2015. Initial targets included a handful of known ISIS locations and assets but primarily focused on anti-Assad militia groups.[32] In the following days, a pattern emerged of Russian airstrikes: Russian air assets would provide air support and cover for ground operations against ISIS targets, led by Syrian army forces, but would strike anti-Assad rebels alone.[33] Consequently, Russian forces and military leadership could maintain the illusion of joint antiterrorism as their sole strategy while acting with near impunity at target selection and prosecution.

The final quarter of 2015 witnessed a stark increase in Russian air sorties and ground operations. October experienced a sustained tempo of about 40 to 50 flights per day, placing heavy operational burdens on pilots and maintainers, while also demonstrating improved reliability and sustainment of Russian aircraft.[34] The apparent strategy during the opening weeks of Russian intervention was to repel immediate threats to the Assad regime, then conduct integration operations with the Syrian army to recapture territory from either ISIS or the patchwork of anti-regime groups.

With sea-launched cruise missiles and coordinated air strikes, Russian military attacks targeted rebel held territory to the west and south of Syria, including Hama, Homs, and Salamiyah provinces.[35] These strikes were quickly followed by actions against northern territories, where the Russian and Syrian coalition fought ISIS in the eastern portions of the Aleppo province and anti-Assad rebels in the west, including Idlib.[36] By late November, immediate threats to

Assad's survival appeared pacified, and Russia prepared to realign its strategy to push ISIS out of their strongholds and retake Syrian government territory.[37]

In mid-November 2015, Russian President Valdimir Putin held an on-the-record meeting with Russian Defense Minister Sergei Shoigu and Chief of the General Staff Valery Gerasimov for an update on military operations in Syria. Of note in the transcript of this meeting is that the three principals refer specifically to ISIS, and then to all other groups, as terrorists; no differentiation is made.[38] Chief Gerasimov reported that in in just over 6 weeks the Russian military contingent flew almost 2,300 sorties and dropped just over 4,000 weapons.[39] The report matches other descriptions of the opening weeks of the Russian campaign and references how the strikes enabled Syrian army ground operations to retake 500 square kilometers and 80 villages.[40]

Left unaddressed in the conversation between President Putin and his top military commanders is any semblance of an end state. The months that follow indicate that Russian leadership struggled to set expectations or political ends, other than the survival of Assad. During the early weeks of 2016, Russian airstrikes enabled the Syrian army to recapture additional territory held by rebel groups in the western sector of the Latakia province.[41] With that victory came a ceasefire agreement from a series of negotiations in Geneva. In his statement announcing the agreement's timeline, Russian President Putin explicitly stated that terrorist groups including ISIS and Jabhat-Al-Nusra were not parties to the agreement and still subject to ongoing military operations.[42] Of greater concern following the announcement of a ceasefire and the excluded parties was the opportunity for Russia to strike anti-regime rebels at will by claiming to continue anti-terror operations.[43]

Instead, less than three weeks after the ceasefire took effect, Putin ordered the primary contingent of Russian forces to withdraw from Syria, citing the achievement of military objectives.[44] Rather than scale back and withdraw significant assets, the Russians escalated their operations shortly after the mid-March withdrawal order was given. Russian forces concentrated efforts at reclaiming the city of Palmyra in central Syria from ISIS.[45] These actions signified a shift in the interests and objectives of the Russian military, away from anti-Assad rebel forces and towards ISIS.

For the next 15 months, Russian forces struck targets throughout Syria, from a variety of expanding platforms, to demonstrate further

capabilities of Russia to project power and protect her interests. As the battle for control over Palmyra continued, the Russian navy deployed an aircraft carrier to the Eastern Mediterranean and the Russian air force to bases inside Iran to deploy air assets from the east or west. While the naval deployment demonstrated to the world that Russia could put an aircraft carrier to sea and conduct air operations, the results were less than impressive. While the carrier strike group lost only two jets, the navy's ability to generate continuous combat-effective air power was ineffective.[46]

The bulk of Russia's combat operations for the last year of heavy deployment concerned the fate of Aleppo. Throughout late 2016 and well into 2017, Russian and Syrian government forces battled a patchwork of rebel militias and ISIS fighters over the northern areas between Idlib and Aleppo. The result was dubious success. While the Syrian government was able to wrest control of Aleppo from rebels, Idlib remained outside of Assad's control.[47] More disquieting is the sum of human suffering caused to "liberate" Aleppo. Both the Syrian and Russian air forces are credibly accused of striking hospitals and other humanitarian targets.[48] While the end of 2017 saw President Putin declare that the operation to liberate Syria had concluded, even in early 2021 the Russian Ministry of Defense's webpage proclaims an ongoing mission in Syria: fight international terrorism and rebuild the peace.[49]

The Russian military entered the Syrian civil war on orders of President Putin to save a client regime, destroy the growing ISIS terrorist threats in the region, and project power outside of former Soviet territory and demonstrate Russian intent and will to play a significant role in Middle Eastern politics. While the first two goals were achieved with moderate success, Russian forces remain in Syria six years after their initial deployment and have no clear exit path. While Russian leadership demonstrated a renewed willingness to deploy forces and act as a power broker, there is a lingering interest and concern as to whether Russia can maintain its deployed presence and act credibly in the region going forward.

Still, Russian capabilities and strategy in Syria represent significant improvements over previous deployments to Afghanistan, Chechnya, and Georgia. Among the factors contributing to a more effective force deployment are advancements in military technology enabling aircraft to detect and avoid hostile fire and expanded intelligence, surveillance, and reconnaissance platforms.[50] Undoubtedly, Russia's

ability to maintain support for a proxy war in eastern Ukraine while delivering effective combat power in Syria illustrates the advancements in military modernization undertaken by the Russian military. Less evident from the Syrian deployment is whether the increased survivability of Russia's aircraft and effective operations against insurgents could translate into demonstrable conventional deterrent or coercive power to elevate Russian military status or attract more foreign weapons sales.

## Conclusion

Increasing tensions over the fate of the Syrian state and the Assad regime pushed Vladimir Putin to order Russian intervention. Syria represented an opportunity for Russia to demonstrate its international standing once again while conducing low-risk military operations to demonstrate new capabilities. The Russian military responded with an impressive operational mission set, including fielding a carrier group, deploying cruise missile strikes from the Mediterranean, basing and striking targets in Syria from Iran, and quickly building military infrastructure at forward bases. Russian aircraft attacked a variety of targets with relative effectiveness and maintained an impressive operational tempo. They lost aircraft for a variety of reasons but maintained operation and enhanced their partner and allied capabilities.

But the Russian intervention in Syria also demonstrated weaknesses at an operational and strategic level. Russians are credibly accused of deliberately targeting and attacking civilians and other humanitarian assets, as well as using anti-terrorist missions as cover to target the Assad regime's enemies. Further, the Russians lost aircraft in action at a rate which still suggests their tactics and equipment are inferior to NATO members' aircraft. Beyond their equipment and tactics, however, lies a deeper question: what do the Russians intend to do with Assad?

Successful operations beat back challenges to the regime by both ISIS and anti-government rebel groups, but it remains unclear if the Syrian government will be capable of maintaining its security without Russian and other third-party allies' assistance. Has Russia found itself in a protracted nation building conflict?

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Chapter 8

# Legal and Ethical Challenges
# in the Syria Campaign

*Lina Svedin*

## Introduction[1]

Syria felt the throbs of the Arab Spring moving across Northern
Africa and the Middle East. Public protests against the Assad regime,
cheered on by the West, met violent repression and spiraled into a
brutal civil war. The escalating conflict and human suffering in Syria
serve as the backdrop for the US Joint Air Campaign in Syria, stretching
from approximately 2013 to 2017. The US made limited interventions
in this conflict to stave off what it perceived as worst-case outcomes,
including the establishment of the Islamic State. Irregular warfare,
shifting alliances on the ground, and the growing demands of inter-
national lawfare had the US facing a series of legal and—possibly
more profound—ethical challenges as it conducted the Syria Cam-
paign. This chapter grapples with intellectually ambiguous yet essen-
tial aspects of military engagements: their ethical implications. To
shed light on these implications, I discuss the difference between
what is *legal* and what is *ethical* during the US engagement in Syria,
2014–2017. I discuss the legal groundings that form constraints, what
the ethical challenges are, and some of these obstacles in the Syrian
campaign. Specifically, I look at ethics regarding the changing use of
US airpower in Syria, US abandonment of Kurdish relations, and
ethical challenges in humanitarian efforts. However, before discuss-
ing how these challenges manifested in Syria, I provide some context
of the conflict and delineate various parameters for our analysis.

## Background on the Syria Campaign

I use the terms "the Syria Campaign" and "the US engagement in
Syria" interchangeably throughout this chapter. These terms refer-
ence the American political and military concerns harbored from the
spread of the Islamic State of Iraq and the Levant (ISIL), later referenced
as the Islamic State of Iraq and Syria (ISIS) or the Islamic State (IS) to a

politically and socially devolving Syria. These concerns required the US to take tactical and strategic military actions. While US engagement in Syria was still not resolved by 2020, I focus on 2014–2017. This timeframe constitutes the most active period of American engagement and includes a change of US presidents. Presidential (coupled with political party) changeover set US policy on Syria in a drastically different direction. I also limit the discussion to the experiences of the US Air Force to leverage my areas of expertise and limit the complexity of the case.

Analyzing the Syrian conflict is complicated, even with confined foci of actors and time span. The conflicts and relationships between the actors involved in Syria are highly complex, making a comprehensive and precise analysis challenging. Viewed through hindsight and a US political and military perspective, it may be more apt to characterize the Syrian campaign as at least three different conflicts. These conflicts include second-order effects that occurred in the same territory and the same period. The three conflicts follow in no particular order.

The Turkish-Syrian conflict with the Kurds played out on the southern border of Syria and the Iraqi border. It was primarily of Turkish interest to prevent the linkage of Kurdish fiefdoms and territory along the Syrian-Iraqi border. The continued territorial disconnect prevented the Kurds from making a unified claim for sovereignty to the United Nations, which hindered the creation of a free and independent Kurdistan. To this day, many ethnic Kurds live on the adjacent Turkish side of the border and have long fought the Turkish government for independence.

The Arab Spring led to a Syrian civilian uprising and massive anti-government opposition demonstrations against authoritarian, but elected, President Bashar al-Assad, demanding Assad's resignation. In response, the Syrian government used brute force to quell the rebellion; however, in doing so, it prompted massive defections from the Syrian Army and transformed the conflict into a civil war. Assad's regime[2] and Syria have a contentious set of supporters that include Russia, Iran, and Hezbollah, each with interests in Syria.[3] As these actors supported the Assad regime, the Syrian conflict became a powder keg of international relations, threats, and posturing. Additionally, Assad faced a global backlash due to the carnage directed at and inflicted on his population. In this evolving situation, the rebel coalition kept shifting in composition and cohesion, making a viable alternative

government unlikely.[4] The Syrian population was fighting the Assad regime and government troops one day, then turning their jerseys around and fighting ISIS in Syria the next. The Syrian military possessed no air defenses; thus, populations and cities became easy targets as the fighting continued and Russia began air strikes.[5]

ISIL's aggressive territorial claim from Raqqa to Falluja, as part of its developing caliphate, officially brought ISIL to war with the Syrian government. However, ISIL, which later evolved into ISIS, also moved in and took Syrian men as fighters. ISIS did not use women and children for armed fighting; however, it did use them as human shields to protect ISIS fighters. The territory, cities, and people that ISIS forcefully annexed or indoctrinated led to murky combatant-(ISIS fighter) versus-noncombatant (civilian) assessments for the US as they engaged ISIS.[6] Frequently, this determination was made in real time, on the basis of whether US forces observed someone planting an explosive device intended for coalition forces or the Syrian Army—in which case the person was considered a legal combatant and targeted. However, even with observation, the US military did not know whether the targeted person was a committed ISIS fighter or a forced civilian fighter.[7]

The secondary effect of these three overlapping conflicts was the looming risk of a confrontation or escalation between the engaging states. For the US-led coalition, the primary concern was an airspace incident with Russia that might trigger a great power conflict. Additionally, there were significant concerns about the Iranian ground presence in Syria and its commitment to Assad. To better understand the complexities of US involvement in the Syrian conflict, international law provides a basis to view both legal and ethical perspectives.

## The Legal Bounds: Why We Look at What Is Legal to Understand What Is Ethical

The legal aspect of the US involvement in Syria is based on international law and the principles embodied by the United Nations.

International Law of Military Operations includes rules embedded in: the UN Charter and customary international law relating to the use of force and the maintenance and restoration of international peace and security, international humanitarian law, international human rights law, and other areas of conventional

and customary international law relevant to international military operation such as international law relative to the status of forces and the exercise of criminal jurisdiction and international law of the sea and air law, the law of international responsibility and international criminal law, international environmental law, and the law of international organizations.[8]

When states draw on international law, norms, and organizations, they aim to increase their legitimacy on the world stage. By doing so, they limit their exposure to negative imaging, reputation loss, sanctions, and retaliatory actions by other states in the international system. Playing by international treaties, collective action principles, and norms comes at a cost; it limits states' ability to act unilaterally and operationally and tactically restricts military exploitation of the battlefield for advantages and opportunities. Depending on where someone sits in the organization of a military effort, the advantages and drawbacks to lawfare,[9] or using the law instead of kinetic means to accomplish military objectives, will come across differently.[10]

The US has traditionally not been an effective wielder of lawfare,[11] attempting to put less weight on international law and institutions than on domestic law and institutions. The US has preferred, in most cases, to preserve the prerogative to design foreign and security policy at will rather than be constrained by international norms, agreements, and collective processes. Yet, the US is arguably one of the world's most legalistic and litigious societies, and it possesses some of the sharpest legal minds and practitioners in the world. The potential for the US to use lawfare more effectively as warfare-by-other-means is considerable. The increasing use, importance, and reach of international law may warrant a more serious and active use of lawfare to support US objectives.[12]

## Ethical Principles and Challenges

Legal actions are frequently considered legitimate, but not always. In the eyes of the beholder, the law may be poorly written or too broad, narrow, soft, or rigid. The law may also be misapplied or misinterpreted in a specific situation. For an action such as a military engagement to be considered ethical, it must be legitimate by one of the following two criteria. First, it is legal because it satisfies the law that the actor subscribes to (and the law is not being misapplied or

misinterpreted). Second, it follows a principled value and demonstrates actions that are consistent with that value despite the potential consequences. This section will focus on the latter. Ethics are moral principles and values a person, group, or society holds, typically driven by or aligned with the laws of that society. Ethical complications arise because laws, norms, and values cannot all be prioritized at the same time and are not always commensurate. Domestic laws concretize and standardize societal values, and the legal process exists to deal with competing values, rules, and circumstances that place one value above another. In international relations, value conflicts are resolved directly by two states through a bilateral agreement or a multilateral forum such as the United Nations.

How do ethical principles help shed light on and increase understanding of the US's legal and ethical considerations in Syria? Ethical actions are not always legal, but they are always legitimate. Ethics is "the right thing to do," even when it is inconvenient or costly. Ethical challenges occur when an actor, such as a state or a military unit, makes an exception to a broadly accepted rule, norm, or law on the basis of something they value. Several espoused values collided with the overriding US national security interest in the Syria conflict. Ethical challenges emerged as core American values surfaced but did not align in specific situations. The values at stake included American safety; leadership in the international arena; an obligation to the collective good; the creation and support of collective action; abiding by international rules; ensuring consistency across cases; and upholding established commitments.

*The collective good* in international relations is something that participants (both active and passive) benefit from but that no one state can accomplish on its own—it requires collective action. Creating collective good requires active contribution from most members and substantial effort and leadership from the most powerful participants.[13] As is the case in many other situations, it is easy to promise to support or take certain actions, but this does not ensure follow-through. While the collective good may allow instances of "free riding" (benefiting without active contribution), it cannot survive active cooperative defection (i.e., states acting in a way that undermines or puts the collective good in jeopardy). Examples of active, cooperative defection are states acting independently, prioritizing self-interest over the collective good, violating the peace and orderly process that organized collective action allows, and antagonizing or threatening

cooperative efforts. States, particularly great powers, harm the collective good when they defect from cooperation. Great powers are de facto norm setters, signal the benefits of the collective good, and reassure smaller nations that those benefits will be available when needed. As a historically influential proponent of collective good, the US withdrawal from international institutions and partnerships signals a weakening support of the collective good and declining importance and relevance of the US in international relations.[14]

*Consistency across cases* is another behavior that captures how rational states interact. Consistency across cases means that similar cases are treated equally, in accordance with precedence, circumstances, and context. Consistency simplifies communication, allows for measured escalation and de-escalation of potentially violent situations, and mitigates risk through predictability. The reliability of consistent behavior appeals to American ideals such as justice, fairness, and commitment to reason. Consistency is the opposite of arbitrary, capricious actions and irrational behavior. It supports rule-bound behavior that sovereign states, such as the US, volunteer to abide by in the international system.[15]

*Being good for one's word*, even in international relations, means doing what one says one will do according to a voluntary agreement. This behavior is tied to credibility, accountability toward others, and the reliability of the state as an international actor. Credibility is vital to state influence and the single most valuable commodity in coercion, alliances, trade, peace treaties, and arms races. For a rational actor, trust is currency—the more a state lies, reneges, or deceives, the less trust and optimism other nations will have in dealing with that state. The US is particularly susceptible to losing international trust due to its continual revolving door of presidential and legislative elites who can change policy, posture, and agreements on the basis of political party objectives. While the best of intentions may drive the US to break its word, the rest of the world still observes and subtracts from the ledger of American prestige.

When multiple values or principles that are not readily commensurate appear to be at stake, an ethical challenge emerges. Whether the actor chooses to recognize and address this challenge is often shaped by the time available, the uncertainty involved, and the risks associated with disregarding or violating one of those values. If an actor recognizes an ethical dilemma, it is sure to generate personal and organizational stress along with situations that are not conducive

to optimal decision making. Ethical conundrums only enhance the fog and friction of warfare yet are rarely codified in after-action reports or lessons learned due to their ambiguous nature. This chapter offers a tiny sample of the various legal and ethical challenges that emerged for the US in Syria in hopes of better preparing our armed forces to deal with these dilemmas as they appear in the future. To facilitate examination and keep ethical principles in mind, I now examine three ethical challenges. The first relates to the American use of air strikes in Syria. The second pertains to the American relationship with the Kurds, and finally, I discuss the humanitarian dimension of the Syrian campaign.

## Changing International Law—The Shifting Legal Ground for Airstrikes

The strategic and tactical ways that the US fought terrorism in Syria manufactured a de facto change of international law. "Although some proponents of the unwilling or unable rationale attempted to bring the legality of such military action within the confines of self-defense action or humanitarian intervention . . . the unwilling or unable rationale does not fit the standard conditions of legitimate self-defense or the essential objectives of humanitarian intervention."[16] The US presented a new norm for going to war (*jus ad bellum)* and the conduct of warfare *(jus ad bello).* The development of a new legal justification for military intervention in another state served US national security purposes in 2001–2016. However, this action also unleashed increased global US military involvement and potential lethal or nonlethal justification for aggression against the US.

International law rarely changes quickly, with swift adjustments occurring in a few extreme cases.[17] Previous rapid shifts in international law include the advent of new technology, such as offshore drilling and outer space flight, or shocking revelations of crimes against humanity (the Nuremberg Tribunal and the creation of the Yugoslavia Tribunal).[18] Another example was the US's use of force against al-Qaeda and ISIS from 2001 to 2015. The 14 years that it took the US to move the opinion of the international community to accept its conduct against al-Qaeda in Pakistan, Somalia, Iraq, and Yemen was extraordinarily fast for customary international law.[19] The US's

position as a norm setter and influential leviathan aided in the rapid movement.

The US's fundamental values of national security and not entering any new military commitments in the Middle East presented an ethical challenge as the IS rose in northern Iraq and marched for Syria. The IS moved quickly across porous state borders and successfully drew on compliance-leverage discrepancies to keep the US military at bay.[20] The US needed legal justification to intervene with military might against the IS in Iraq and Syria. Obama administration officials and other US government representatives floated several arguments and rationales leading up to the first set of air strikes against ISIS in Syria in 2014. These included, among others, "the right of humanitarian intervention, the right to use force in a failed state, and the right of hot pursuit."[21] Because of limited available time and significant public debate regarding the merits of each justification, the Obama administration abandoned all of them as viable legal rationales for military intervention.

Additionally, US leadership desperately wanted to avoid putting troops on the ground.[22] President Obama worked diligently to abdicate US involvement, resources, and personnel in Afghanistan and Iraq; thus, he recoiled at the idea of committing troops to another Middle East conflict.[23] Retired US Marine Corps four-star general and former Central Command Commander Anthony Zinni described US civilian leaders as having "become 'paranoid about boots on the ground.'"[24]

Instead, President Obama, "[i]n order to afford legality to those air strikes," was to "propose a new rule of humanitarian law, the 'unwilling or unable rationale,' proclaiming that armed forces of State A can take military action against terrorist groups located in State B if the government of State B is unwilling or unable to prevent its territory from being a launching pad for acts of terror violence."[25] Airpower, the US' preferred method of fighting IS (the Afghan model), ran headfirst into the principles of sovereignty, the collective action processes of the UN, and the possibility of Russian and Chinese vetoes in the UN Security Council.

Ultimately, the US decided to rewrite the rules for going to war to make a predetermined course of action fit. In doing so, the US attempted to satisfy the competing values of American safety, ridding the world of terrorism, abiding by international law, leading in the international community, convincing allies to join the effort against

the IS, and pursuing national interests in Iraq and Syria with or without host nation leaders' permission. Consequently, the US presented the 2014 Syrian air strikes against ISIS as part of the War on Terror, rather than a military action aimed at supporting the Syrian uprising or toppling the Assad regime. However, critics pointed out that the 150 air strikes the Obama administration launched against Iraq in 2014 and having US Special Forces fighting side-by-side with the Kurds in northern Iraq against ISIS were, in every real sense, waging war.[26] The US proposal leveraged the UN-recognized state's right to exercise self-defense if attacked (Art. 51 of the UN Charter), and the US argued that the air strikes in Syria "were lawful acts of collective self-defense on behalf of the government of Iraq."[27] When first proposed in January 2014, the UN Security Council rejected this rationale in connection with Syria. However, the US continued carrying out air strikes in Syria even though the actions violated international law, were condemned by Syria, Russia, and China, and were questioned by North Atlantic Treaty Organization (NATO) allies France and Great Britain.

The Syrian conflict pulled the US in several incompatible directions due to competing values, desires, and objectives. In 2013–14, these tensions included concluding significant US involvement in and withdrawing troops from Afghanistan and Iraq, preventing ISIS from taking hold in northern Iraq and Syria, and supporting a Syrian democratic uprising to promote regime change. Policywise, this manifested as the US exercising its self-proclaimed right to fight terrorism wherever terrorists seek refuge—including states such as Syria—with or without sovereign permission. The US military intervention in Syria was not based on a formal declaration of war nor sanctioned by Congress or the United Nations; the legal status and terminology used to describe the US effort in Syria remained cloaked in opacity.[28] US military engagement in Syria violated a preexisting sense of commitment to reason. The US broke several agreed-upon rules regarding armed conflict against another state. While air strikes over foreign sovereign soil were not legal at the time, American power and influence slowly reshaped international paradigms on the matter. By 2015, the Security Council issued its resolution encouraging action against terrorist organizations such as the IS. The US demonstrated the ability and willingness to change the rules of the game (international law and appropriateness) to best suit its needs.

"The implication of this newly accepted change in the international law . . . is that any State can now lawfully use force against non-state actors (terrorists, rebels, pirates, drug cartels, etc.) that are present in the territory of another State if the territorial State is unable or unwilling to suppress the threat posed by those non-state actors."[29] This rationale exponentially increases the number and scope of military engagements that the US (and other countries) may become involved in on the basis of domestic nonstate actors identified. The US Department of State maintains a list of "terrorist organizations that pose a significant threat to the United States and its allies around the world;"[30] this list contained "fifty-eight terrorist groups headquartered in thirty-five different countries (in addition to ISIS in Syria and Iraq)" in 2016.[31]

There is widespread agreement[32] that there was no legal basis for the air strikes that the US launched "against al-Qaeda and ISIS targets in Syria."[33] The US-led coalition strikes constituted a violation of standing international law as a breach of Syrian territorial integrity and sovereignty (UN Charter, art. 1[1]; 2[4]). In 2014, the Syrian government informally protested US air strikes but largely tolerated the strikes as the US targeted ISIS's expansion and communicated with the Assad regime that year. However, the Syrian government did not request US assistance in combating terrorism within its territory, a point Syria expressly and repeatedly raised with the UN Security Council in 2015. Some legal experts argued that the lack of formal Syrian protest and toleration of US military actions on its soil and airspace constituted "tacit consent." Put another way, Syrian governmental inaction implied approval of US military operations, a questionable legal ground for violating territorial sovereignty in international law. Arguably, granting Syrian tacit consent as support of US military engagement in Syria in 2014, this consent was nullified when Syria lodged formal protests with the Security Council, denouncing coalition air strikes as a violation of its sovereignty in 2015.

The US certainly felt that going after the IS, a UN-defined terrorist organization, and the collective good that would come from eliminating it was legitimate. The US also recognized the legitimacy of collective action and international law, so it sought to bring legitimate means in line with the ends. While doing so, however, the US neglected to recognize and uphold the fundamental values of sovereignty and territorial integrity of Iraq and Syria, the need for Security Council approval of the military engagement so as not to be considered an act of

aggression against Syria, and the need for congressional approval for what was, in essence, conducting war. The result, in terms of legal and ethical standing of the US air strikes in Syria, was that they were unlawful in 2014 by both domestic and international law, NATO allies viewed them as illegal and thus did not support the effort, and the US opened the world and itself to a new set of future challenges by expanding the rationales for military intervention.

Looking specifically at "the military responses to acts of orchestrated violence," some argue that it seems "international humanitarian law always lags behind the times."[34] International conventions, or agreements, are by nature conservative, as "[c]onventions regulating the conduct of armed conflicts are drafted with past experiences in mind, and are, as far as means and methods of conducting armed interventions are concerned, almost invariably outdated at the time of their adoption."[35] For example, the international community struggles to develop strategies around cyber warfare as a means of combat.[36] State-led development of new customary international norms and rules may be inevitable and acceptable. However, why states push specific norms, and the consequences of those changes, warrants critical normative mindfulness.

The US role in reinterpreting and establishing new customary international law to achieve warfare objectives is an example of effective instrumental lawfare. However, it is not without ethical implications, particularly concerning how fast the customary law changed and the scope that the new rationale suggests. The short inculcation time also means that the new rule's bounds of authority and applicability have yet to be defined. Envisioned safeguards against abuse of the rule are also untested.[37] However, in November 2015, the UN Security Council issued the unanimous nonbinding resolution (Resolution 2249), which supported international coalition strikes against ISIS in Syria. The resolution is precisely the type of institutional support that consolidates an emerging custom and removes doubts about its legitimacy and applicability.[38]

## Relying on the Kurds, then Abandoning Them

In 2014, ISIL moved across northern Iraq and Kurdistan into Syria, conducting mass killings to establish its caliphate. The US worked with Iraqi Kurdish forces on the ground in Iraq to stop the advance

and to protect the local population from atrocities.[39] The US conducted air strikes in defense of Erbil, "the de facto capital of Kurdish-controlled northern Iraq."[40] "Obama ordered air strikes targeting IS militants in northern Iraq after they advanced on the Iraqi Kurdish capital of Erbil, where the US has a consulate and personnel advising the Peshmerga security forces."[41] President Obama "justified that action in part as necessary for the protection of American personnel and US national security interests." He also argued that "it was necessary to ward off a potential genocide of Iraq's Yazidi minority."[42]

> After capturing nearby Mosul, ISIS forces attacked a number of towns in the Sinjar area populated by a Kurdish minority known as the Yazadis—killing thousands of men and capturing hundreds of women and children as slaves. When some 30,000 Yazadis took refuge on . . . Mount Sinjar, the ISIS forces cut off their means of egress from the mountain. At the time, Iraq had not yet given permission to the United States to use force in its territory against ISIS, but with the Yazadis' water and food supplies dwindling, President Obama authorized air strikes on the ISIS forces in order to save their lives, saying, "When we have the unique capacity to avert a massacre, the United States cannot turn a blind eye."[43]

In combination with air strikes against ISIL targets, the US carried out humanitarian missions delivering "food and other supplies to Iraqis . . . trapped on mountaintops by militants."[44]

The air strikes in northern Iraq began without the Iraqi government's approval; however, after US pressure, Iraq Prime Minister Nouri al-Maliki stepped down a few days later and was replaced by Haidar al-Abadi.[45] Abadi made a formal request for other states' support in fighting ISIL, an organization the UN had already formally designated a terrorist organization.[46] "At the request of al-Abadi, the United States launched operation 'Inherent Resolve,' consisting of widespread air strikes on ISIS targets in Iraq in August 2014. On September 19, 2014, France joined the US in bombing ISIS in Iraq, and two weeks later the UK joined its two NATO allies in engaging in air strikes in Iraq."[47]

The Pentagon was extremely concerned by ISIL's progression and warned that air strikes might not be enough to stop the group.[48] The air strikes slowed ISIL's advance in northern Iraq, but the sense was that "the US military's efforts [were] 'unlikely to affect' the terrorist

group's overall capabilities or operations in other parts of Iraq or Syria."[49] The chairman of the Joint Chiefs of Staff, Gen. Dempsey, stated that defeating ISIS "would require 'addressing that part of the group that resides in Syria' as well as 'on both sides of what is essentially at this point a nonexistent border' with Iraq."[50] When ISIL moved across the border into Syria, approaching the city of Kobani on the Turkish-Syrian border, the US joined efforts with the Kurdish Peshmerga militia in Syria to fight ISIS.[51]

In August 2014, the US government was still not committed to a course of action regarding the ISIS spread into Syria. "Obama . . . will see a wide range of plans for the military. 'There is a range of ways for us to confront this threat, that we need to confront this threat in a sustainable way,' [a White House spokesperson] said. 'It can't just be through brute US military force.' "[52] However, ISIS then publicized a video of the organization beheading two American journalists[53] and challenging President Obama to back down or more Americans would be harmed.[54] The beheadings were allegedly a retaliation for the US air strikes against ISIS targets in Iraq that started in August 2014.[55] The violent and rapid establishment of the ISIL/ISIS caliphate across Iraq and Syria and the execution of the two American journalists triggered the need for a US response. By late August 2014, President Obama made a political commitment to defeating the IS and stated, "The US will be 'relentless' in going after the Islamic State."[56]

The US conducted its first air strikes in Syria in September 2014.[57] In what has been described as a "reluctant rescue," Obama "ordered air strikes to halt the expansion of ISIS, and protect the Kurds, Yazidis and indigenous groups from being killed."[58] Obama publicly announced the planned air strikes on 10 September 2014 as one of the strategies to counter ISIS in Iraq and Syria.[59] His decision raised "fears of a new US engagement in Iraq and military involvement in Syria," which would require Congressional authorization. However, the Obama administration quickly asserted that "[a] broader military cooperation to defeat ISIS [would] be launched with Arab countries and North Atlantic Treaty Organization (NATO) forces."[60]

At first, the US effort in Syria was as light as it could be, merely resupplying Kurdish troops battling ISIS for control of Kobani. Then, it appeared the Kurdish ground forces were "gaining the upper hand against ISIS with the help of US air strikes" in northern Syria.[61] What followed was two years of the Kurds fighting ISIS coupled with Syrian government advances. As the US commenced coalition air strikes

against ISIS targets in Syria, principally with the Arab League, the Syrian government and Syrian rebel groups opposing the Assad regime criticized and rejected the air strikes.[62]

The US tried to build partnerships with moderate Arab militias on the ground to fight ISIS. For example, despite the US providing support to groups on the Syria-Jordan border, the groups quickly experienced defeat. This loss left the US ever more reliant on Syria's Kurdish defense forces for its strategy against ISIS. The Kurdish fighters had fought hard and were successful, but the Arab population in the areas that ISIS captured did not trust the Kurds. The US recognized that the Kurds had interests in establishing a free Kurdistan, and the Kurds would be necessary to build Arabic-Syrian armed forces that the US could partner with.[63]

In 2015–16, US-led coalition air strikes and special operations forces helped fight ISIS in Syria and Iraq.[64] In Iraq, Assyrian Christians, Kurds, and Iraqi armed forces picked up the fight against ISIS in 2015. Together they launched an attack to take back the city of Mosul in Iraq; however, Kurdish forces in Iraq continued to need the support of US air strikes.[65] The US was still trying to eliminate the ISIS caliphate in Syria and Iraq when international attacks in 2015, tied to ISIS, solidified the support for air strikes in Syria among several traditional US allies. France and Great Britain joined the US-led coalition air strikes in Syria after the UN Security Council passed its resolution in support of defeating ISIS as a terrorist organization.

In early 2017, the new US administration headed by President Trump responded strongly to the Assad regime's use of chemical weapons in Aleppo, Syria. Then, the US policy on Syria took a drastic turn. In 2018, the Kurds were abandoned as allies and left in a noose as the US shifted toward a domestic policy of isolationism and a closer alignment with Turkey internationally. A crisis developed in northern Syria after the US withdrew troops from the area, affording Turkey unencumbered freedom to start a military intervention.[66] "One of the immediate consequences of the Trump pullout decision was Turkey's decision to launch a military campaign in northern Syria to establish a buffer zone that is 32 km deep and 440 km along the border to drive away the Kurdish supported People's Protection Units (PPU) under the Syrian Democratic Forces (SDF) which is an umbrella organization of different groups dedicated to establishing Kurdish autonomy."[67] The Turkish government had long opposed these groups because of their link to the Kurdish independence

movement in Turkey.[68] "Turkish President . . . Erdogan saw the American troop withdrawal from north Syria as a green light to attack what are seen as terrorist bases on the south-east border of Turkey with different bases and headquarters taking the brunt of shelling and bombardment; including towns like . . . Kobani . . . which witnessed the defeat of Islamic State in Iraq and Syria (ISIS) in 2015."[69]

The Kurds in Syria saw President Trump's decision to pull out of northern Syria in 2018 as careless and irresponsible. The decision was particularly bitter for the Kurdish SDF and PPU, which had been strong US allies in the fight to defeat ISIS. Leaving the Kurds at the mercy of the Turks was demoralizing for Kurdish fighters. The fighters felt betrayed by the American turnabout and similar withdrawals by the British and French that followed the American exit. It signaled US opportunism, Trump's particularly unpredictable brinkmanship, and the US's sly willingness to abandon friends just as quickly as it makes them.[70]

Several values competed for primacy and created ethical challenges regarding the US's alliance with the Kurds. The US wanted to stave off the IS in Iraq but did not want to commit troops on the ground. Instead, the US relied on the Kurds to take and hold territory with the support of US air strikes. This reliance placed a significant burden and risk on the Kurds to achieve American objectives, especially once the IS started capturing considerable territory in Syria. Before the presidential turnover, Obama explicitly stated that the air strikes were to stop the IS and to protect the Kurds, Yazidis, and other indigenous groups from being killed. Consequently, there was a strong commitment early in the partnership to protect the Kurds and aspirations to prevent mass killings of vulnerable populations (tied to the principle of responsibility to protect, or R2P).

The Kurds fought to control cities in northern Iraq and Syria and keep them free of the IS. The Kurds held up their end of the commitment, but the US ultimately did not. In 2018, the US abandoned the responsibility to protect the Kurds with the surprise withdrawal of US forces from Syria, leaving the Kurds in the path of Turkish air strikes and land movements. The US did not uphold its commitment to the R2P as it refused to use air strikes to prevent unabated civilian genocide. This evolving situation exposed a shallow commitment to the principle of R2P as an international norm by the US (and other countries), despite its many signatories only years before.

## The Humanitarian Dimension—Preventing War Crimes and Civilian Mass Casualties

I realize that in a complex situation such as the US engagement in Syria, there is considerable room for debate and confusion about what ought to be considered legal and what should be considered ethical. Multiple international laws, norms, conventions, and multilateral agreements simultaneously influence state actions. However, international humanitarian law is the primary law governing "the conduct of hostilities in armed conflicts."[71] Most international actors abide by several core values and norms, including US policymakers and military.

Weapons of mass destruction (WMD) in Syria posed another series of ethical challenges for the US. The international public viewed Assad's use of chemical weapons against the Syrian population as an atrocity.[72] In 2013, President Obama warned Assad that the attempted use of chemical weapons or other WMDs against his population would force US intervention.[73] "At the heart of President Obama's threat to attack Syria for its alleged use of chemical weapons is a basic principle of international humanitarian law: the protection of innocent people from indiscriminate harm in warfare. Poisonous gases, by their nature, may float anywhere. They can wipe out entire neighborhoods—as the world saw in horrific videos from Syria last week."[74] US intelligence knew that Assad's regime possessed WMDs,[75] which is why Obama's warning to Assad was direct and clear—abandon chemical weapons and WMDs usage against Syrians or face escalation.

The US faced the ethical challenge of confronting a similar situation when a rogue authoritarian regime gave the US reason to enter Iraq in 2002. Then-Senator Obama had also been one of the most vigorous and articulate domestic opponents of the war in Iraq.[76] In Iraq, the intelligence on WMDs proved inaccurate, and the WMD rationale backfired. However, in Syria, the US knew the Assad regime possessed WMDs.[77] In the long shadow and lessons learned of the Iraq War, the Obama administration chose to make a public warning and set an ultimatum for Assad.

The next ethical dilemma arose when Assad used chemical weapons despite the US warning,[78] and Obama was unable to secure an approval from Congress to launch air strikes as a retaliatory response—therefore faltering in reinforcing his ultimatum. This lack of military response not only made the American president seem weak and

boastful, but it also seemed inconsistent with the US's prior actions and stands to protect and support populations during the Arab Spring.

A third dilemma arose concerning securing the chemical weapons that Assad might have in his possession before using them again. In September 2013, Russia intervened and offered to reason with the Assad regime, locate the chemical weapons, and oversee their destruction.[79] The US intelligence community indicated that Russia might have initially provided Syria with the weapons, and Russia's gesture of arbitration was an attempt for Russia to rectify a situation that it might have been responsible for creating. Furthermore, as a longtime supporter of Syria's Assad regime, Russia would likely have more significant sway in obtaining any remaining weapons. Thus, the Obama administration brokered a deal with Russia to negotiate the Syrian government's relinquishment of the chemical weapons.[80] The US heralded securing and destroying the weapons on a US ship in 2014.[81] However, the celebration was short lived, as UN inspectors found the chemicals sarin and ricin in drainage pipes and artillery shells in 2015, suggesting that Syria was likely violating the 2013 Russian agreement.[82] Then, in early 2017, Assad resumed chemical attacks against his population.[83]

The US Air Force watched real-time surveillance footage of people buckling over, seemingly from neurotoxin exposure. "Assad basically weaponized bleach that he used against his own population."[84] US policymakers felt that if America took a position on the use of WMDs in Syria, then the US was taking a position on the Syrian civil war—which they did not want to do. The US was limited in eliminating a key chemical manufacturing facility because of the presence of Russian ground troops located near the plant. The risk of injuring or being accused of injuring Russian forces was not a risk the US was willing to take.[85]

Critical voices asked the outgoing Obama administration if it would establish another "red line" for Assad to scoff at and for Congress to ignore. On 4 April 2017, the Assad regime targeted Khan Sheikhoun, a town in the Idlib Governorate of northwestern Syria, in a chemical attack.[86] Idlib was an area that UN representatives had highlighted as a vulnerable target since it provided a temporary home to over 2.5 million internally displaced Syrians. After Assad's chemical attack, the US leadership was notified that civilians and children were disproportionately targeted.[87] In response, newly elected President Trump ordered retaliatory US air strikes against a Syrian chemical

weapons facility and Shayrat Air Base, which US intelligence asserted was the source of Assad's chemical attack.[88] This retaliatory action restored some confidence within the international community that the US could and might act decisively to ward off atrocities in armed conflicts. The issues surrounding the legality of military air strikes and international law (such as against ISIS in Syria and compelling Assad's actions) remain hotly contested among scholars and practitioners.[89]

A fourth ethical challenge presented to the US was Russian troops and air strikes in Syria starting in 2015.[90] The US actively avoided incidents with the Russians in the crowded Syrian airspace, where the US was carrying out air strikes against ISIS and providing coverage for Kurdish ground offensives. Keeping close surveillance on Russian ground and air movements was part of a focused effort to avoid collisions and any accidental injuries of Russian soldiers. However, while keeping a close eye on Russian movements, the US observed Russian attacks hitting numerous civilians and the Syrian Army using barrel bombing as the Assad regime and Russia were pushing into cities.[91] Barrel bombings are indiscriminate attacks utilizing barrels filled with shrapnel and TNT dropped from low-flying aircraft intended to inflict significant damage with little precision.[92] The Geneva Convention dictates that the purposeful bombing of civilians in a conflict constitutes a war crime.[93] The US disapproves of the use of barrel bombing because of its low precision and high collateral damage.

UN and Red Cross observers reported on the impact of the barrel bombing.[94] The Russian offensives, particularly in Aleppo, Syria, were compared with the Blitz in London and the firebombing of Dresden in World War II.[95] These two wartime examples of excessive violence aided in establishing the Geneva Convention.[96] Once the US was aware of the Syrian Army's barrel bombing, the ethical challenge was how to react.[97] Would the US hold the Syrians and Russians accountable in some way and try to stop the senseless killing of civilians? The low visibility and coverage in the media of this aspect of the Syrian-Russian approach suggests that the US chose not to act publicly to stop it.

The US threat to attack Syria for the use of chemical weapons was based on the principle of protecting innocent people from indiscriminate harm in warfare, established by international humanitarian law, human rights law, and the Geneva Convention.[98] The US's ethical challenge revolved around witnessing the Syrian Army, later helped by the Russians, indiscriminately killing the Syrian population and

whether the US, as international leaders, should forcefully oppose those actions.[99] The US chose to uphold the international principle of not getting involved in another state's civil war[100] and intervened in only one instance.[101] The use of chemical weapons against civilians was the most heinous war crime observed in Syria. However, the mass killing of civilians in Syria had been going on for years by 2014 when the US started conducting air strikes with a motive to protect. The mass killings of civilians would continue, and in fact escalate, well beyond 2014 without a concerted international intervention to stop it.

The US's commitment to protecting the innocent from harm during warfare proved hollow as the US did not invest significant effort to protect Syrian civilians. International norms stipulate countries should not take sides in a civil war. The US seemingly upheld this norm despite civilian killings in Syria, while hypocritically supporting the Syrian rebels fighting Assad with equipment and weapons at the outset of the civil war. This created a real and perceived discrepancy in how the US treated cases of countries wielding WMDs, comparing Iraq in 2003, Libya in 2011, and Syria in 2013 and 2017. There were also great discrepancies in how the US viewed and treated Syrian sovereignty across the conflict, violating the fundamentals of the concept in several respects, while upholding it to the letter of the law in others.

## Conclusions: Legal and Ethical Lessons from the Syria Campaign

The Syria conflict challenged the appropriateness of international law and multiple US core values. When multiple incommensurate values or principles converge, an ethical challenge emerges. Some of the legal and ethical lessons that we can and should draw from the US engagement in Syria include the following:

The primacy of air strikes versus minimizing military member exposure to danger on the ground eclipsed numerous other values presented during the Syrian conflict. Despite the US's need and expectation to be a leader in international relations, the US struggled with collective action and international law when addressing the IS. The US defeated the IS territorially[102] but at the cost of collective action, the support of the UN and traditional allies, and betraying the

Kurdish allies that had brought about that victory. This cost will have long-term negative consequences for the US's ability to build alliances and support for military engagements in the future, its legitimacy as a world leader, and its credibility as an adversary.

The US recognized and espoused support for several of the values and norms shared by the international community, but the Syrian conflict forced the US to reassess and, in certain instances, act in direct opposition to those values. The US adhered to the rules of war (jus in bellum) by not supporting either side of the Syrian civil war (after its initial support of the opposition). However, when presented with an ethical challenge, the US deliberately reshaped customary international law to make its intervention (jus ad bellum) legal. However, strict adherence to some international norms and rules while ignoring others when convenient does not equate to ethical behavior, especially considering the severity of the issues ignored and values not upheld. These included the collective good of protecting civilians from indiscriminate harm in situations of war, enforcing the ban on WMDs, and preventing genocide.

The ethical implications of how the US faced and dealt with the value conflicts in the Syria Campaign are manifold. Primary among them are the impacts on US safety and credibility. The world became less stable and, although the Syria Campaign may have increased the safety of Americans in the short term, it likely increased risk to the US in the long run. US actions in Syria diminished American credibility and reliability to current and potential partners and in the minds of adversaries. Secondary but not insignificant implications include the US becoming less relevant as a leader in international relations, a decreased ability to draw on collective action when needed, operating in a less cohesive international community, and a decreased ability to use international law as a legitimate basis for future interventions.

### Notes

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9.  Orde F. Kittrie, *Lawfare: Law as a Weapon of War* (New York: Oxford University Press, 2016).

10.  Examples from the Syria conflict in which the U.S. exercised instrumental lawfare include creating new international laws designed to disadvantage an adversary and reinterpreting existing international laws to disadvantage an adversary (Kittrie, 13). Examples of adversaries using compliance-leverage disparity lawfare include the Assad regime loudly denouncing and calling out civilian casualties when U.S.-led coalition air strikes hit a hospital and a Syrian Army campsite (Asa Fitch and Thomas Grove, "U.S. Strikes Syria: Syria's Six-Year War, From Arab Uprising To Global Conflict," *Wall Street Journal*, 8 April 2017). The US had a formative experience with this type of compliance-leverage disparity lawfare in 2001, as the Taliban applied battlefield tactics that included making it appear "that the United States was waging war in violation of the law of armed conflict" (Kittrie, *Lawfare,* 19). Maj Gen Charles J. Dunlap Jr., USAF, retired, suggested that the Taliban sought to accomplish two objectives this way—first, to get the US military to hamstring itself through self-imposed restraints, and second, to erode public support for the war by making it appear that the US was not fighting a just war or not fighting fairly (Kittrie, 18).

11.  Kittrie, 3.

12.  Kittrie, 1–3.

13.  Collective good such as security, peace, or a good climate.

14.  The US cannot repeatedly remove itself from engaging in the collective good (defect from cooperation) without diminishing its own importance, relevance, and prestige. The cooperative game may not survive without the US if it is essential to the game.

15.  There is no world court or world government that can force a sovereign state to accept or commit to upholding these rules.

16.  Johan D. van der Vyver, "The ISIS Crisis and the Development of International Humanitarian Law," *Emory International Law Review* 30, no. 4 (2016): 531–63.

17. Michael P. Scharf, "How the War Against ISIS Changed International Law," *Case Western Reserve Journal of International Law* 48, no. 1–2 (Spring 2016): 15–67. A so-called "Grotian Moment" in Customary International Law.

18. Scharf, 66.

19. The "Security Council approval of the 2001 invasion of Afghanistan to dislodge al-Qaeda and the absence of significant protest of the subsequent drone strikes against al-Qaeda leaders and operatives in Pakistan, Somalia, Iraq, and Yemen" suggested that the sentiment of the international community was shifting and "international law seemed to be moving rapidly toward adoption of the 'unable and unwilling' principle of self-defense" (Scharf, 66). There were also, however, steps to counter this shift and that put in place a contrary standard that would curb the scope and use of the new norm, including rulings by the International Court of Justice in the 2004 Wall case and the 2005 Congo case. In these rulings, the Court "reaffirmed that international law permits extraterritorial attacks against non-state actors only when their actions are attributable to the territorial state" (Scharf, 66), suggesting that a state has effective control over a non-state actor's behavior but is unwilling to stop this behavior.

20. Lawfare can be defined as using law or legal measures to achieve military objectives that would otherwise be accomplished by kinetic means. There are two basic approaches to the conduct of lawfare: one is an instrumental use of legal tools, the other involves the use of disparity in compliance-leverage. In this case the IS exploited the fact that the US, in particular the US military, saw itself as constrained by international law in its actions (compliance leverage), whereas the IS did not. The likelihood that the US would comply with international law and norms in its behavior toward the IS and civilians (avoiding civilian casualties) was a discrepancy that the IS consciously used (by hiding among civilians) to further its military objectives (gain control over people and territory). Kittrie, *Lawfare*, 17–20.

21. Scharf, "How the War Against ISIS Changed International Law," 15.

22. Rebecca Collard, "The U.S. Challenge of Turning Syria's Ragtag Rebels into a Fighting Force," *Time.com*, 30 September 2014, http://search.ebscohost.com/.

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25. van der Vyver, "The ISIS Crisis," 531–32.

26. Kenny, "Airsrikes against ISIS."

27. Scharf, "How the War against ISIS Changed International Law," 17.

28. The New Yorker, "The Name of the Fight," *New Yorker 90,* no. 28 (22 September 2014)*,* http://search.ebscohost.com/.

29. Scharf, "How the War against ISIS Changed International Law," 67.

30. Scharf, 67.

31. Scharf, 67.

32. e.g., Karinne Bannelier-Christakis, "Military Interventions against ISIL in Iraq, Syria and Libya, and the Legal Basis of Consent," *Leiden Journal of International Law* 29, no. 3 (September 2016): 743–75, https://www.cambridge.org/; Roy Gutman, "The View from Syria: In War on Terror, Humanitarian Law Takes the Back Seat," *Case Western Reserve Journal of International Law* 52, no. 1 (2020): 9–26, https://scholarlycommons.law.case.edu/; Scharf, "How the War against ISIS Changed International Law;" and van der Vyver, "The ISIS Crisis."

33.  *Jus ad bellum* and *jus in bellum* are the two categories of reasoning that pertain to the legitimacy and legality of military force. *Jus ad bellum* covers the legitimate reasons for going to war and engaging in military conflict. *Jus in bellum* pertains to how the military instrument is used in war or a military conflict. "Today the Charter of the United Nations provides the legal regime governing the use of force among nations (jus ad bellum). The Charter essentially outlaws the use of force, authorizing it only pursuant to a Security Council resolution issued under Chapter VII, while preserving and recognizing in Article 51 the inherent right to self-defence, including collective self-defence." William K. Lietzau and Joseph A. Rutigliano Jr . "History and Development of the International Law of Mitliary Operations," in *The Handbook of the International Law of Military Operations*, 2nd ed., eds. Terry D. Gill and Dieter Fleck (Oxford: Oxford University Press, 2016), 16; and van der Vyver, "The ISIS Crisis," 531.

34.  van der Vyver, "The ISIS Crisis," 562.

35.  van der Vyver, 562–63.

36.  van der Vyver, 563.

37.  Some emphasize the limited nature of this newly sanctioned behavior and its safeguards, although these circumscriptions are largely theoretical and untested. "Importantly, the right to use force against such nonstate actors is subject to several limitations which will impede the possibility of abuse. First, the individual or aggregate actions of the non-state actors must amount to the equivalent of an armed attack to trigger the right to use force in self-defense. Second, the use of force must be targeted against the non-state actors and not the State or its military unless the State is found to be in effective control of the nonstate actors. Third, military action must still meet the principles of necessity, proportionality, and discrimination. Further limitations are likely to develop in relation to international reaction to State invocation and application of the new rule." Scharf, "How the War against ISIS Changed International Law," 67.

38.  Even though "UN Security Council Resolution 2249 does not clearly endorse a particular legal justification" and thus is somewhat ambiguous as a source of support, it "will likely be viewed as confirming that use of force in self-defense is now permissible against non-state actors where the territorial state is unable to suppress the threat that they pose." Scharf, "How the War against ISIS Changed International Law," 66-67.

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41.  Howard LaFranchi, "Another 'Red Line'? Obama Again Considers Airstrikes in Syria," *Christian Science Monitor,* 27 August 2014, https://www.csmonitor.com/.

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47.  Scharf, "How the War against ISIS Changed International Law," 22.

48.  Mulrine, "Pentagon 'Very Concerned' by IS Threat."

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93.  United Nations, "Article 3(1)" *Geneva Convention Relative to the Protection of Civilian Persons in Time of War*, 12 August 1949 (New York: United Nations, 1949), https://www.un.org/.

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98.  Depending on how you define the conflict in Syria as either an international, non-international, or transnational armed conflict, a war of national liberation, or a civil war, one of these bases for the treatment of noncombatants applies. While the nature, actors, and the violence of the conflict in Syria has shifted over time, making any of these definitions possible, the three bases of the treatment of noncombatants argue for restraint of violence, particularly indiscriminate violence that causes much suffering, and for the humane treatment and protection of those not participating in or no longer participating in hostilities. Even combatants have some protection against the use of indiscriminate and inhumane weapons, i.e., weapons of mass destruction, in active conflicts. Notable is that int=rnational humanitarian law applies to and is binding not only for organizations and states, but also for individual persons. Jann K. Kleffner, "Human Rights and International Humanitarian Law: General Issues," in *The Handbook of the International Law of Military Operations*, eds. Terry D. Gill and Dieter Fleck (Oxford: Oxford University Press, 2015), 35–62. Furthermore, a norm and UN commitment that envelops these ideas is the Responsibility to Protect (R2P) developed by the International Committee on Intervention and State Sovereignty in 2001. It is "an international norm that seeks to ensure that the international community never again fails to halt the mass atrocity crimes of genocide, war crimes, ethnic cleansing and crimes against humanity" (Global Centre for the Responsibility to Protect). The concept formed in response to the international community's failure "to adequately respond to mass atrocities committed in Rwanda and the former Yugoslavia during the 1990s. . . . The Responsibility to Protect was unanimously adopted in 2005 at the UN World Summit, the largest gathering of heads of state and government in history. It is articulated in paragraphs 138 and 139 of the World Summit Outcome Document" (The Global Centre for the Responsibility to Protect).

99.  "International humanitarian law seeks to limit the effects of armed conflicts by protecting persons who are not or no longer participating in the hostilities and by restricting the means and methods of warfare, that parties to an armed conflict may use in their quest to overcome the adversary" (Kleffner, "Human Rights and International Human Law," 36). Kleffner also outlines "it is a cardinal principle that parties to an armed conflict have to distinguish between members of the armed forces of a party to an armed conflict, civilians directly participating in hostilities and military objectives, on the one hand, and civilians and civilian objects, on the other hand. While attacks may be directed against the former, it is prohibited to direct attacks against the latter" (Kleffner, 36). International humanitarian law "prohibits launching an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated" (Kleffner, 36). This proportionality principle recognizes that while it may not always be possible to spare civilians in armed conflict, the incidental harm must be proportional to the concrete military advantage expected from those actions.

100.  Mary Ellen O'Connell, "Continuing Limits on UN Intervention in Civil War," *Indiana Law Journal* 67, no. 4 (Fall 1992): 903–13. This norm is based on

articles 2(1), 2(4), and 2(7) of the UN Charter, which respectively establish the principle of sovereign equality of its member states, prohibit the threat or the use of force on any state, and prohibit the intervention "in matters which are essentially within the domestic jurisdiction of any state." United Nations, *Charter of the United Nations,* 1945, https://www.un.org/.

101.  The exception was President Trump's air strikes in retaliation for the use of chemical weapons by the Assad regime in 2017.

102.  "At its height, the Islamic State—also known as ISIS, ISIL, or Daesh—held about a third of Syria and 40 percent of Iraq. By December 2017, it had lost 95 percent of its territory, including its two biggest properties, Mosul, Iraq's second largest city, and the northern Syrian city of Raqqa, its nominal capital." The Wilson Center, "Timeline: the Rise, Spread, and Fall of the Islamic State," *The Wilson Center*, 28 October 2019, https://www.wilsoncenter.org/.

Chapter 9

# Combat Search and Rescue in OIR
## Lessons for Airpower Leaders

*Jared Donnelly and Paul Sheehey*

*The second-worst fear of US commanders came true Wednesday, as the Islamic State of Iraq and Greater Syria captured a Jordanian pilot attacking ISIS targets in northeastern Syria. It could only have been worse, from the US perspective, if the pilot had been American, falling into a barbarous enemy's hands on Christmas Eve. It marked the first capture of an allied fighter in the four-month war against ISIS.*

<div align="right">Mark Thompson, 24 December 2014</div>

The Jordanian pilot, Moaz al-Kasasbeh, was flying near Raqqa, Syria, in support of Operation Inherent Resolve (OIR) when his F-16 was shot down by ISIS militants. Although the US military vowed to "support efforts to ensure his safe recovery," that opportunity never materialized.[1] In February of 2015, a video surfaced that showed the Jordanian pilot escorted at gunpoint in a cage and burned alive. This purportedly occurred weeks earlier in January and before the deployment of combat search and rescue (CSAR) forces in OIR. During the Senate hearing 113-589 on 16 September 2014, three months before the shootdown, Senator Jim Inhofe, R-Okla., asked Army General Martin Dempsey, the chairman of the Joint Chiefs of Staff, "First, in your opinion, are the pilots dropping bombs in Iraq, as they're now doing, a direct combat mission? Second, will US forces be prepared to provide CSAR if a pilot gets shot down, and will they put boots-on-the-ground to make that rescue successful?" General Dempsey's response was, "yes and yes."[2] Unfortunately there were no American CSAR units in the theater, which proved to be a major political hurdle for coalition forces to overcome after the shoot down of the Jordanian pilot.

The lack of highly trained and adequately postured rescue forces explicitly devoted to such a mission led to unease within the coalition forces flying combat missions over Syria and Iraq. The demonstrated

risk of pilots being shot down and burned alive for an ISIS propaganda video was simply too great. Chairman Dempsey's 16 September statements, coupled with ISIS's now confirmed willingness and capability to shoot down coalition fighter aircraft over Iraq and Syria, spurred the US Air Force to rapidly deploy dedicated CSAR forces. Personnel recovery (PR) forces in support of OIR were deployed in late January, achieving full operational capability in early February 2015.

The events of late 2014 and early 2015 most clearly demonstrate the strategic political link to military operations that PR, and CSAR specifically, holds for both US and coalition governments. It is clear at the strategic level that the national domestic appetite for any loss of US and coalition lives by the constituents of their countries is low and demonstrates a critical capability for military and political leaders to consider when executing any combat operations that risk American and coalition lives. While CSAR does not guarantee the safety of *every* pilot shot down over enemy territory, it does significantly mitigate risk and provides an important assurance to both aircrew and their nation that every effort will be made to bring them home should it become necessary.

While the importance of CSAR may seem obvious, pilots often assume PR capability exists in every combat theater and it is therefore often taken for granted. The United States upholds the moral obligation of the *solemn promise* to our servicemen and women and most often includes support for coalition members and civilian designees as well. The solemn promise, as captured in the Air Force Creed, means that American service members will not leave a fellow American behind and will do whatever is possible to rescue or recover those in peril. This is most succinctly stated by the motto of the United States Air Force CSAR community which states, "These things we do . . . That others may live."[3]

Dedicating forces to uphold this moral imperative demonstrates the value the United States places on every service member in potential danger both within the Department of Defense (DOD) and to the rest of the world. As such, the psychological and practical impact of this moral contract is not lost on our allies. To ignore this obligation not only undermines the moral adherence to a greater code but also has significant tactical influence that can be difficult to analytically capture as well. The best way to illustrate this influence is to acknowledge the risk that each and every service member is *willing* to accept by knowing our military's commitment to uphold this solemn promise.

A Soldier will take great personal risk on foot to patrol an area with known improvised explosive devices, the Marine will breach an enemy door not knowing what awaits on the other side, and the Airman will fly deep into contested territory, all to risk the decisive actions needed to win in combat. They do this because they know if something goes wrong, the best trained and equipped rescue forces in the world will do everything in their power to get them home. Simply put, CSAR is a force multiplier.

The purpose of this chapter is to highlight the implications of upholding these obligations through the lens of lessons learned from CSAR airmen in support of OIR. The goal is to better inform and educate future combined and joint force air component commanders (CFACC/JFACC), senior leaders, and those tasked with making difficult decisions on the employment of personnel recovery forces in future conflicts to increase the efficacy of such forces in future conflicts. OIR has provided a complex and diverse hybrid conflict beyond the counterinsurgency (COIN) fight seen in Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn. Because this conflict has included multiple state-actors with complicated alliances, cultures, and ethnic divides, all with independent geopolitical objectives and desired end states, it has the potential to illuminate lessons applicable across the spectrum of conflict.

The overarching need for strategic guidance to identify the positive and negative objectives in each conflict holds key implications for tactical actions. The lack of such objectives makes the employment of military force in this environment a significant challenge. PR is no different. This hybrid conflict has clearly highlighted that complex environments will require judgment and decision-making at the lowest tactical levels to achieve success in time-constrained situations, knowing that perfect battlefield awareness is unlikely. The simple fact is that time-compressed decision-making in a complex, contested, and degraded environment will require a greater understanding and acceptance of risk to achieve our nation's desired military and strategic objectives while protecting our most valuable assets, our service members. With a clear understanding of strategic context and operational objectives from military leaders, tactical commanders can then apply the lessons learned and best practices of past conflicts for optimal employment of military forces in the future.

This chapter does not seek to provide a chronological history of Air Force CSAR operations in OIR, as this has already been done by

the Air Force Historical Research Agency (AFHRA) and is captured well in a two-part article authored by Dr. Forrest Marion of the AFHRA titled, "The *Contract* Broken, and Restored."[4] This chapter instead serves to look at the background of the operational environment, decision-making, and contextual elements of OIR significant for understanding several key lessons in the application of CSAR for future airpower leaders. Many of these lessons may also have applicability for the employment of airpower beyond PR as it relates to critical issues, such as delegation of authority, critical tactical decision-making, command and control, and execution authorities. This begins with a brief discussion on the decision-making structure in OIR between the strategic, operational, and tactical levels of war. This helps to illuminate how tactical action can affect strategic objectives, and the impact that misunderstanding this linkage can have in combat. Many of the lessons covered in this chapter demonstrate the challenge of tactical decision-making in dynamic or novel situations.

## Tactical Decision-Making: A Common Theme

The authority model employed during OIR, where the approval required to drop a single bomb rested at the general officer level, will not lead to success in future fights—it will likely lead to failure. This likelihood indicates the *necessity* for senior leaders to provide clear guidance and enduring intent that allows for strategically aligned decisions to be made at the tactical edge, particularly in the early stages of a conflict, and will be crucial to future success. Because of the no-fail nature of PR missions, where time-critical decision-making in a complex and dynamic environment is more often than not a life-or-death endeavor, the importance of empowering leaders responsible for tactical decision-making is a key takeaway that applies to many of the lessons discussed in this chapter.

Although decision authority for tactical action may not always have rested at senior levels, particularly in the beginning of the conflict, the evolution of combat operations in both OIR and in the COIN operations that preceded it reveals how decision-making authority tends to be held at ever-increasing levels within the chain of command. This is especially true as technology allowing commanders greater situational awareness increases, the pace of fighting decreases, or the leader's ability to command and control becomes more effective

throughout the course of a protracted conflict. Increased situational awareness seems to be the enemy of delegated tactical decision authority. This, over time, creates an environment where tactical leaders are neither trained nor comfortable with making decisions at the lowest levels and instead simply become followers in a micromanagement culture. This will inevitably cause problems in a conflict with a peer or near-peer competitor where such command and control is likely to be significantly degraded, both initially and over a longer period, as compared to the communication pathways established in previous decades in COIN operations of Afghanistan and Iraq.

The first lesson discussed in this chapter deals with understanding risk, arguably the most pertinent factor when determining the level of authority required for authorizing operations. Assessing PR risk requires that leaders understand the indirect relationship that exists between rescue forces and those they are tasked to support, which are not always easy to appreciate. One key part in decision-making is the tactical expertise required for optimal employment of combat forces. The following section demonstrates how a lack of understanding of such risk relationships can undermine the efficacy of PR forces in combat.

## Understanding CSAR Risk: The Catch-22 of OIR Risk Assessment and Optimal Utilization of a Specialized Capability

One of the most critical aspects of employing forces in combat is to understand the differences in risk assessment and acceptance as applied to different airframes and mission sets. Platform-specific risk assessment criteria is one of the most critical aspects a CFACC, JFACC, or Deputy must understand when considering and authorizing CSAR alert postures, as risk is the dominant criteria used for such determination. As an example of this, unlike fighter or bomber aircraft, rotary-wing CSAR platforms cannot use altitude to avoid small arms fire, at least not without buying a greater risk from man-portable air defense or surface-to-air systems.

The ease in deploying small arms weapons by enemy forces throughout a combat theater means that rotary-wing CSAR forces must accept the potential threat of such weapons on every mission. Given the proliferation of these low-altitude threat systems, the lowest possible risk to CSAR rotary-wing forces can never be fully mitigated.

In OIR, the baseline risk for CSAR forces was determined to be "low+" for all operations beyond the forward line of own troops (FLOT), meaning that the potential for exposure to small arms fire always exists and can never be dismissed, only mitigated through tactics.[5]

As a rule, to achieve a low-risk category, operations must remain inside the perimeter of main bases or forward basing. This can be achieved through a ground alert search and rescue (GSAR) posture from a friendly base location. Air Force rotary-wing CSAR forces supporting strikes beyond the FLOT simply do not have the luxury of operating at low risk during mission execution. The risk factors can quickly increase to moderate, high, or even extreme levels based on threat laydown and survivor location.

In the traditional (and primary) CSAR mission set, which is how the Air Force doctrinally executes the PR task, nearly all operations should be expected to be beyond the FLOT. Given the use of CSAR forces in the nondoctrinal mission sets of medical evacuation (MEDEVAC) or casualty evacuation (CASEVAC) in the COIN operations of the past 20 years, leaders have come to assess Air Force CSAR risk in the same light as other departments' PR force capabilities and tasks. This is a fallacy given that the doctrinal mission of CSAR that, by its very nature, more often requires an entirely different measure of evaluation derived on the expectation of a nonpermissive operating environment.

The experiential paradigm of combat leaders educated under a counterinsurgency warfare lens created a false perception with regards to assessing, mitigating, and accepting risk for Air Force CSAR forces in OIR. This misunderstanding manifested many times when Air Force CSAR assets were tasked to support air strikes in Syria, particularly early in the conflict. For these missions, the strike aircraft commonly assessed their *initial* operational mission risk as moderate for cross-border operations. Strike packages were then able to leverage air tasking order (ATO)–assigned CSAR forces as a mitigation measure to reduce the package risk down to low. Similarly, Air Force CSAR forces conducted mission risk assessment to support the strike mission.[6] Most often, if an airborne alert (XSAR) was utilized, the risk was no less than "low+," and if a ground alert posture was chosen from the permanent forward operating base (FOB), risk was normally assessed to be low.

It was common for the component commander or deputy to only authorize PR force postures that were at or below the strike package

risk level. This is logically understandable as it is difficult to justify putting CSAR assets, a high-demand/low-density capability, at greater risk than those they were tasked to support in a contingency. The conundrum inherent to this methodology was that the mitigated risk of the strike package was often the sole risk level used for comparison in the decision calculus for selecting XSAR or GSAR CSAR alert postures.

If the strike package was able to mitigate missions to low risk on the basis of the *availability* of CSAR support, the CSAR forces were similarly only allowed to execute under a low risk as well. The fallacy is that the decision to authorize a particular CSAR posture was often made independently of the PR posture *necessary* to provide a realistic chance of recovery, that is, the posture that was actually sufficient to qualify the strike risk down to low. Given the expansive nature of the operating area, only an XSAR posture provided a response time that met the CFACC intent and justified the low-risk assessment claimed by the strike package. What was lacking was an understanding of the correlation of risk-to-capability between XSAR and GSAR postures. With this myopic assessment, it was commonplace for CSAR to be tasked with ground alert much of the time, as it almost always constituted the lowest overall risk to the CSAR forces. The nuance implication is that the strike had an expectation that PR assets were postured to affect a timely recovery should it became necessary. Unfortunately, all too often the strike package had a dramatically reduced potential for successful recovery in case of an isolating event, as the PR forces were too far away to affect recovery on a reasonable timeline.[7]

The desire to utilize CSAR forces from a GSAR posture whenever possible was not limited to the desire for lowering mission risk. The influence of having only a small contingent of dedicated CSAR forces in theater likely made preserving in-theater CSAR forces a factor in the decision calculus for authorizing alert postures. One of the of the most dangerous and frustrating fallacies when authorizing the use of CSAR forces in combat is the notion that such forces should only be used if you are willing to lose them. Col Jason Pifer, who was then a lieutenant colonel and the first personnel recovery task force (PRTF) commander deployed in OIR, stated, "Don't ever tell a JFACC early on that Air Force rescue has really small numbers, so only use them when you really need them, because they may say well, I'm never going to use them because I want to retain that capability."[8] Giving this direction creates the false impression that CSAR is in some way a

burned capability once employed. This perception can be likened to an inimitable cyber-attack capability, in that it often becomes unusable for future operations. While CSAR is a specialized force with relatively small numbers—and this was absolutely the case in the initial OIR deployment of a single unit type code (UTC) in January of 2015 consisting of an HH-60J and an HC-130J—that should never be correlated with a lack of resiliency in environments with a high operations tempo. Colonel Pifer emphasized that senior leaders need to understand that "they're there for you and your theater to support the requirements of your theater. Don't look at your PR fleet as something you think you only use in case of emergency, use them for your operational requirements and ensure you have PR when you need them [as often as needed]."[9]

A misunderstanding of CSAR *capacity* is insidiously integrated into the calculus of senior leaders and their staffs when setting requirements and understanding capabilities of a PRTF. This can be seen in the codified and contractually obligated support requirements that delineate the *specific* number of PR events that can be requested in a 12- or 24-hour period by a theater commander. This type of capacity framing should be avoided as it cannot effectively reflect the real-time ability for CSAR forces to support combat missions. While the need for codified planning factors for deploying and employing CSAR forces is understandable, placing contractual constraints on a force tasked specifically to reactive contingency operations risks unnecessarily limiting combat operations.

These codified capacities more often *create* the false impression that there is a stated maximum capacity in the CSAR force. Because CSAR missions can vary dramatically in their planning and execution timelines, defining contractual obligations negates potential real-time support capabilities to support the commander's objectives. Commander's guidance should be used to smartly justify the required CSAR force size and composition to be deployed in support of the operation or campaign based on the expected need and should also allow for real-time adjustments once in theater. A codified force capacity mandate negates the real-time forces available to the JFACC and unified combatant command (CCMD) which often unnecessarily limits the perceived availability of CSAR support. Any request to delineate sortie generation or contractual obligation requirements should provide the flexibility required to maximize CSAR efficacy.

To more effectively support the CFACC mission, effective linkages of strategic intent to operational staff planners within the PRTF should be created that provide sufficient guidance and that can be implemented by experts at the operational and tactical levels. The goal is to "ensure PR forces are postured to support in the most effective manner . . . and ensure you have PR planners from the operational units doing mediation at the commander's planning staff that can speak to you and your staff about the most effective and efficient manner to utilize such assets. We need to normalize the discussion and be educated about it."[10] Operational and tactical flexibility will be discussed in later sections, but it is important to note that excess capacity is often available given the inherent flexibility within a PRTF construct. This potential excess ability was demonstrated in OIR with internal logistical support to the tactical operating bases by executing logistical support and recurrent mission rehearsal exercises.

To maximize the PRTF capabilities and capacities to their full potential, restructuring both deployment complements and command structures needs to be examined in the future. This requires a change in CSAR organization and deployment models that allow for greater ability to move away from the prescriptive and predefined UTC compositions deployed in OIR and COIN theaters in the past to employment complements tailored to the specific needs of particular combat environments. Additionally, moving away from the COIN operations of the past, the composition of deployed rescue forces should be re-evaluated on the basis of the peer and near-peer adversaries outlined in the 2022 National Defense Strategy.

When examining future rescue deployment complements, it is important to acknowledge that CSAR forces are always on alert and must be ready to respond to myriad contingencies for many different customers across a potentially vast area of responsibility (AOR). The resulting argument for utilizing a GSAR posture is that if limited CSAR forces were singularly tasked to support a strike package hundreds of miles away, it may create a vulnerability elsewhere. The thought that maintaining CSAR forces at the "home station" FOB provides a reliable location for planning, preparation, and response to support any task does have merit. While these are important considerations, prioritizing a PRTF's ability to respond to *unexpected* missions over planned support missions, with known risks that necessitate direct CSAR coverage, ultimately degrades support to planned operations.[11] Both spreading a specialized capability and

limiting the inherent flexibility of a specialized capability degrade its overall efficacy.

No CSAR mission can be entirely planned and rehearsed given the inherent lack of clarity intrinsic with time-constrained contingency operations. Most CSAR missions are immensely complicated given the seeming infinite number of variables and contingencies that can arise during the recovery of an isolated person. However, as President Eisenhower stated best, "Plans are worthless, but planning is indispensable."[12] The time dedicated to a specific mission plan (geography, timing, package composition, contract establishment, etc.) will always yield a greater chance for success; CSAR is no different. Unfortunately, time is often not a luxury provided to a PRTF as it is the single most important factor when determining the success rate of affecting a recovery of an isolated person. While dedicated planning certainly increases the expectation for success, OIR demonstrated that maintaining CSAR forces at their "home-base" FOB to achieve higher fidelity in planning for unplanned events ultimately leaves everyone without.

CSAR forces deployed in the initial OIR deployment were simply too far from the strike target areas in Syria to provide a reasonable timeline for response and recovery from a GSAR posture. The failure to recognize the important link between basing location and recovery likelihood is not unique to OIR. The same argument can be made for enduring deployments in other parts of the world where CSAR forces are tasked to support an expansive AOR from a base too far from the areas most likely to create an isolating event.

Maintaining CSAR forces at their "home-base" deployed location is common for high-demand/low-density assets. Unfortunately, the most critical driving factor for successful PR efforts does not come from fidelity in planning but rather in using standard procedures that minimize recovery timelines. Therefore, authority should be given to the subject matter experts to determine how best to minimize response timelines in support of operations. This means they should be utilized in a manner that provides the best chance for a successful recovery of known operations, *not* be held in perpetuity for the potential unknown. Clear prioritization of planned operations allows for both dedicated planning and faster response times. Holding PR forces for the unknown actually *creates* the danger it is there to protect against. It is a fallacy to increase the known risk to some to maintain a capability to guard against the unknown.

Aside from the desire to maintain rotary-wing CSAR capability for an unknown or unplanned event in OIR, or to reduce risk to the PRTF as previously discussed, a compounding desire for a GSAR posture in OIR came from how aircraft maintenance should educate and, more specifically, *influence* alert postures. Given the aging HH-60G fleet and the often-long distances associated with supporting airborne alert missions, there was an understandable perception that such taskings would create maintenance issues that might ground the rotary-wing CSAR forces. Unfortunately, in some cases, this perception influenced the decision to provide ground alert over airborne alert. The logical fallacy here is essentially a restatement of the previous fallacy: If you are saving PR capability for a future strike package at the detriment of the current strike package, you have not guaranteed future success nor mitigated the immediate *known* risk to the force. Rescue forces should always prioritize the current requirements independently of potential future needs, just as for unplanned events. If maintenance, weather, or any other factors render future PR support unavailable, the air plan can be delayed or adjusted to accommodate such a circumstance but should not be a preplanned limitation for those currently at risk of isolation.

This does not mean that maintenance factors should be ignored but instead correctly prioritized *after* and *independently* from each mission tasking. *Every mission should be analyzed to determine the most effective posture that provides the greatest opportunity and likelihood of recovering airmen at risk of isolation.* As Colonel Pifer stated, "The maintenance piece ensures you are able to go when you need to go" and, while never prioritized over the recovery of an isolated person, should always be in the calculus.[13] However, any decision to increase current risk to the force for the sake of future potential risk should be deliberately calculated and understood by all and never become "normalized." While the hope is these maintenance factors become less significant with the relatively new HC-130J and with the HH-60W replacement CSAR helicopter coming online, this is a lesson that should not go unnoticed.

Ultimately, the miscorrelation of CSAR posture, risk assessment and acceptance, and subsequent likelihood for recovery resulted in strike packages executing during OIR at much higher threat of isolation than the strike packages realized whenever CSAR forces operated from a GSAR posture. As discussed, CSAR forces will almost always have a higher baseline risk than the strike package they are tasked to

support; this is inherent in their employment. Decision-makers must understand this relationship and be able to cognitively separate risk between platforms that operate in different environments or alter risk definitions to level out the higher baseline risk of CSAR forces. The lesson here is simple: While many factors such as relatively higher CSAR risk, aircraft maintenance rates, and the benefit of dedicated planning are important to consider, leaders *must* prioritize time as the single most important factor for affecting the recovery of an isolated person in combat. Strike package risk mitigation by way of dedicated CSAR forces must focus on a posture that reduces recovery timelines (and therefore proximity), and *not* simply comparative risk to the CSAR force, potential maintenance implications, or the potential for unanticipated PR events elsewhere. Leaders must properly task, appropriately posture, and accept sufficient risk to CSAR forces beyond that of the package they are tasked to support. Doing so provides the capability that best supports coalition forces in the future.

It is important to note that while the movement of PR forces into Turkey in early 2015 dramatically reduced CSAR response times for the Syrian AOR and was in line with CSAR Tactics Techniques and Procedures, still it generally provided greater support to US and coalition forces only when XSAR postures were allowed.[14] While airborne alert and forward staging options were sometimes authorized over the years to support specific strikes in OIR, the lesson of PR-specific risk and the focus on recovery timelines remained and cannot go unlearned in wars of the future.

## Learn From Success . . . Not Just Failure

Not all lessons are learned from the fallacies or failures of wars past; some come from the outcomes of decisions or actions taken outside of normal task-organized constructs. The case of the rescue evacuation from an Iranian missile strike in 2020 demonstrated the efficacy of tactical decision-making in ambiguous environments. The merits of empowering decision-making at the tactical edge are an ever-increasing focus of the Air Force writ large. Warfare is increasingly complex and ambiguous; it frequently requires leaders with direct tactical control to make timely decisions out of necessity over the institutionalized decision authorities of the past.

The drive to maintain decision authority at increasingly higher levels seems more prevalent as conflicts wear on and as the fog of war tends to rise over time. Structures and processes evolve to provide greater information and situational awareness to strategic leaders, and the strategic requirement for justification of continued operations on foreign soil tends to increase the desire to limit any action that is counter to the larger geopolitical narrative and correlated desired end states. These factors seem to make decisions gravitate to higher and higher levels almost insidiously to where the rotation of tactical forces causes them to lose the greater perspective of the strategic vector. This is almost a natural progression because the senior leaders are often in theater far longer than tactical units and therefore can maintain better continuity through making *more* decisions based on changing environments. This consolidation of authority leads tactical commanders to request higher levels of permission for tactical decision-making that should be at their level. Senior leaders have a much more mature understanding of the strategic lines of engagement, lines of operation, and even lines of effort within the campaign plan that the tactical Air Force units don't always understand, owing to their shorter rotations. This aside, tactical decision-making for highly specialized capabilities is a key factor to be discussed within this chapter.

There are myriad examples, with many having a valid rationale, why lower-level leaders so often defer decision-making to higher levels of the chain of command. The challenge for operational leaders is to avoid decision paralysis, particularly for decisions that *do* fall within their scope of responsibility, and to examine causal factors that must be overcome to enable faster and more decisive decision-making in the future. The attack on Al-Asad Air Base in Iraq, by Iran on 8 January 2020, provides a valuable PR-specific case study to illuminate the challenge of decision-making in this environment and the dangers of decision paralysis.[15]

In response to the US airstrike that killed Iranian General Qassim Suleimani on 3 January, Iran struck Al-Asad Air Base in western Iraq with short-range ballistic missiles. Some US forces had advance notice of the strike, CSAR forces not among them, and many units quickly evacuated the base while others sheltered in bunkers.[16] This presented PR forces at the CSAR compound at Al-Asad with a challenging decision. They had both the internal capability and capacity to evacuate but lacked clear intelligence and senior leader guidance

on how to proceed. Two major factors in this scenario will likely occur frequently in future conflicts: First, the challenge of ensuring access to reliable intelligence that can validate threats and timelines, and second, the reluctance to relocate strategically important tactical forces without specific operational orders to do so from higher echelon leadership. As with any nonstandard circumstances, there are a number of factors that complicate *any* decision to relocate combat forces while actively supporting ongoing operations, yet as the Air Force moves toward concepts like Agile Combat Employment that require rapid relocation of forces in a contested environment, these scenarios are likely to arise more frequently.

As was the case in OIR, CSAR forces in theater are generally tasked to maintain an alert posture 24 hours a day. Therefore, any decision to stand down the alert or reposition forces likely opens a gap in PR coverage across the AOR. This has potentially cascading effects that often lead to either canceled combat missions or, at the very least, increased risk to ongoing operations, as has been discussed earlier. Additionally, specific to the events of 8 January 2020, with a potential attack imminent on US forces, there was the high likelihood and expectation that CSAR forces would be tasked to aid in any post-attack scenario, and maintaining this capability was critical. Capturing the various competing factors this situation presented to operational leaders is important to contextualize to glean potential lessons for the future.

Since accurate and actionable intelligence is the lifeblood of any combat operation, the lack thereof holds similarly dangerous implications. The Iranian missile attack was not only a provocative and arguably unlikely move by Iran but was also not a likely scenario considered in OIR. This left commanders uniquely charged with decisions that were outside of "normal" or expected combat operations. Although prudent planning for an evacuation contingency had been accomplished internally by the rescue professionals at Al-Asad, the lack of information and authorization to relocate contributed to delayed execution of those plans. This was demonstrated by noting that other units operating out of Al-Asad had, for one reason or another, begun their evacuation far earlier than the PRTF. While there are numerous avenues for receiving, distributing, and accessing intelligence across the DOD and intelligence community, who has access to this information and when is often stove piped within various functions or organizations or intentionally restricted among various units and commands. PR forces, by the very nature of their mission, should be

a high priority for time-critical information. Unfortunately, interservice and interagency information is compartmentalized with the intent of protecting sensitive data through stringent control and vetting processes. Without deliberate and contractual information sharing structures in place, those tasked with providing reactive support will suffer delays that, in the case of personnel recovery, could result in catastrophic consequences and mission failure.

Given the often-austere operating locations of CSAR forces, and the challenges of establishing robust and secure forms of communications, there is often reduced access to higher levels of classification by many of the USAF CSAR units in theater. As of 2019, there were programs underway to help solve both network and access issues to provide the situational awareness required to conduct CSAR in the future, but they had not yet been employed. Bottom line, future PR forces tasked to support US, coalition, and Task Force elements need access to current intelligence applicable to the mission they are supporting to successfully conduct CSAR. Access to intelligence information and decision-making is inextricably linked and therefore should be analyzed together. Therefore, the next step is to recognize how the impact of inferior information available to the PRTF, coupled with the unique and unfamiliar events of 8 January, resulted in decision-making challenges for CSAR unit leadership.

Because PR assets are often considered a strategic commodity, many decisions for the employment of PR platforms in theater are commonly held at very high levels, through the theater joint personnel recovery center. The multiple levels of coordination and tasking may complicate the timely reactive, or even proactive, decision-making process required in a dynamic environment. This is not to say that maintaining control of strategically important assets is without merit. As an example, a seemingly insignificant tactical error, such as an unintended border incursion or unauthorized overflight of a sensitive or religious site, could result in significant political implications or international incidents that may result in degradation of subsequent operational efforts. These types of unintentional tactical actions demonstrate how crucial it is that operators understand both strategic intent and political implications of apparently minor actions and take additional measures to guard against them. This should not be an argument for greater centralized control of tactical units, but instead it should advocate for better guidance and intent from senior

leaders who facilitate decentralized, lower-level decision-making at the tactical edge.

With the time-compressed complexity that future combat will produce, the implications of tactical actions on strategic intention will likely be ever-more present. Therefore, empowered leaders at the operational level and below, armed with strategic context, can then provide the specificity in direction and timeliness of action to execute strategically aligned decisions. The need for fast decision-making was demonstrated in the case of the attack on Al-Asad. Luckily, the reactive decisions made by the unit commander there were in time to ensure no PR forces were killed or significantly injured in the attack. Empowered leaders at the tactical edge will become more important as the future of combat *necessitates* faster planning, decision, and execution cycles. No leader would knowingly and willingly fail to protect forces under an impending threat; yet a lack of top-down direction and reliable intelligence could create the conditions to cause significant loss of life and equipment. The current cumbersome coordination and confirmation requirements for critical decisions are simply too slow to allow for rapid decision-making under a top-down leadership model.

The lesson Al-Asad provides should *not* be that times of significant ambiguity and compounding complexity are an exception and therefore are outliers in the dynamic nature of conflict that cannot be ratified in operational guidance and regulations. Instead, this should provide a case for quite the opposite. Wars of the future *will* be fast, complex, and intentionally ambiguous, and require leaders with direct tactical control to make timely decisions out of necessity. It is often said that regulations are written in blood, meaning those situations where we have suffered a loss of life often bring about mandated changes to operating procedures to try to mitigate the chance of recurrence. We should use 8 January 2020 as an example of how we can learn the necessity of decentralized decision-making without the loss of life. This should be a keynote demonstration of how those with the best real-time data should be trusted to employ the war fighter as they see fit, given the understanding of their mission and intent of their leadership.

## Jack of All Trades, Master of None: Mission Focus, Mission Creep, and the Loss of Focus on Critical Capabilities

Personnel recovery is a doctrinal Air Force task. The Air Force conducts this task through the combined employment of the "Rescue Triad" which includes the HC-130J Combat King II, the HH-60G/W Pavehawk, and the Guardian Angel Pararescue teams. Together this triad provides immense flexibility, range, and capability to prosecute the CSAR mission almost anywhere and at any time. Additionally, while the DOD provides well-trained and capable forces that *can* be used in various capacities to accomplish tasks across the scope of PR operations, *only* Air Force CSAR trains to the all-weather, all-environment, high-end contested CSAR operations. While branching out from the Air Force-specific doctrinal application of CSAR in the conflicts in Iraq and Afghanistan in the previous decades has had a significant positive impact on saving US and coalition forces, it has also led to an apparent loss of focus on, and recognition of, the CSAR mission set as a core competency for the service.

Since it is part of the intent of this chapter to provide lessons learned from OIR on the employment of CSAR forces to senior leaders, this section looks at the negative impact that a loss of focus on doctrinal mission sets has on the readiness and specialized capabilities of CSAR forces. This is particularly clear when comparing potential future peer and near-peer conflicts with that of the utilization of CSAR for CASEVAC in the COIN conflicts of OEF and OIF. It is always in the interest of and an obligation of the Air Force CSAR force to provide PR support whenever and wherever needed, based on combatant command desires and direction. There is now a need to refocus on the purpose and doctrinal task of CSAR forces to confront National Defense Strategy (NDS)–defined threats of the future. There is a logical argument that as rescue forces are brought into a conflict, the initial task of PR starts with CSAR in support of the air war, then, as the conflict evolves by securing the airspace and land sufficient to transition to a land war, trends toward ground force support via CASEVAC or MEDEVAC becoming the most likely or most common PR task. In this evolution, the initial use of Air Force CSAR forces makes sense; start with a specialized CSAR capability and then move down the spectrum from CSAR to less specialized PR tasks. By reevaluating the

need for specific PR capabilities based on the evolving operational environment, and assigning CASEVAC or MEDEVAC units once able, the impact of enduring deployed commitments on a specialized high-demand low-density (HDLD) capability can be better mitigated. Doing so would also allow CSAR forces to better focus on training and tactics that preserve the unique capabilities CSAR brings to the DOD.

While Air Force CSAR forces provide a CCMD significant employment flexibility across the spectrum of PR operations, there is a cost associated with such flexibility when used in perpetuity, primarily the time and resources required to train a high-end PR force prioritized toward contested rescue operations. As currently tasked, enduring commitments to deployed theaters such as United States Africa Command and United States Central Command to conduct CASEVAC missions, while important, do not require an exquisite high-end capability and could lead to an erosion of the triad's high-end capability.

Although CSAR units have traditionally conducted mission rehearsal training when able in theater, this is often little more than maintaining currencies in basic mission execution skills. These types of missions are not sufficient for maintaining the level of proficiency for high-end operations and are often done to ward off significant readiness deficiencies upon their redeployment to their home station units. It should be noted that if deployments to locations where basic mission rehearsals are not possible due to increased risk or diplomatic restrictions, the burden of requalification on the home station is likely to be too great to overcome. This is particularly true for those units with only one or two deployable UTCs limited by personnel or aircraft. The long-term view for the implementation of CSAR forces in theater should look to validate the necessity of doctrinally assigned tasks for the force and weigh the priority of such a task against projected future requirements.

If deployed CSAR assets are employed without a focus on doctrinal mission sets, the natural tendency for Air Force CSAR forces is to find utility wherever and whenever able. This is not necessarily in the best interest of preserving exquisite CSAR capabilities in the long run. As a conflict matures to the point that significant risk to US and coalition aircraft diminishes as a result of air superiority or dominance, PR too shifts its focus from the contested recovery operations of CSAR, and transitions to CASEVAC, MEDEVAC, transport, or other PR tasks. It is at this juncture that the lack of *necessity*, not

priority, causes issues. When Air Force CSAR forces are deployed to enduring theaters that do not necessitate the need to support contested recovery of isolated personnel, other PR assets should be prioritized. As such, Army Dustoff, Marine tactical recovery of aircraft and personnel (TRAP) teams, or Navy maritime rescue forces could be tasked to support the predominant forces at risk in theater. This would not only allow for improved readiness of HDLD CSAR forces but also ensure the other service branches are training and equipping their internal PR forces as their doctrine demands. Second, the natural tendency for any underutilized support force, particularly rescue forces, is to actively search out opportunities to validate their capability and support the CCMD. By aligning capability with theater requirements, the DOD will be better able to ensure all doctrinal missions are preserved at the highest level of readiness.

When focus shifts away from doctrinal mission sets, the tendency for CSAR forces to find utility results in divergence on mission focus within the "rescue triad." This search for usefulness can be seen most clearly in the USAF pararescue community, given their desire and demonstrated ability to successfully operate outside of the PRTF. Although rotary-wing assets can operate in a wide variety of locations, Pararescue, by their very "human weapon system" nature, have a unique ability to support and integrate within other teams or specialized units. As a result, Air Force pararescue jumpers have increasingly looked for opportunities to integrate outside of the PRTF once the demand signal for doctrinal CSAR diminishes. Without a mission, this desire to seek out nondoctrinal missions is an effort to gain relevancy, experience, and significance in a theater to validate their deployment. For a community that has significant training and proficiency requirements, it is understandable they would want to use their capabilities regardless of who they are deployed to support directly. Over time, in enduring deployments to theaters unlikely to generate an isolating event to aircrew, a greater emphasis on training that focuses on nondoctrinal taskings *will* erode doctrinal CSAR mission capabilities. When a community that endures significant training, qualification, and currency burdens goes unused, this idleness creates frustration, particularly when it is deployed in support of an operation that lacks a specific need to utilize its unique capabilities. In the long run, if we are not using the triad under its doctrinal methodologies, in locations that lack a reasonable expectation for

use, we run the risk of continued divergence within the triad that will undermine the capabilities of Air Force CSAR.

Another critical point to communicate to senior leaders is that continuous training in theater to maintain currencies will simply be unavailable in a future near-peer or peer fight. While this may seem obvious when read, the lack of *intentional* recognition can very easily result in unintentional oversight, resulting in negative second- and third-order effects. Given how Air Force CSAR has been used in the COIN fight and its relatively permissible environment, operations in a contested theater present challenges that leaders have been able to overlook for decades.

The undue risk associated with flying training and currency-based mission rehearsals in a future near-peer conflict is expected to be well beyond the CFACC's Accepted Level of Risk. Therefore, currency training should not be relied upon to preserve high-end capabilities for long-term rotational deployment commitments. The lesson here is clear: Deploying AF CSAR units outside of permissive operating environments seen in the later COIN theaters of OEF and OIR will not permit flying training that maintains current and qualified personnel. Maintaining training currencies while deployed is not unique to AF CSAR; it applies to every Mission Design Series in the DOD. However, the low-density nature of AF CSAR assets coupled with significant specialized training requirements present unique challenges. Senior leaders must recognize that the loss of training while deployed in a nonpermissive environment creates the potential for significant reconstitution timelines for qualification, currency, and proficiency that are not easily or quickly overcome.

In some single-UTC units, this may be insurmountable without numerous qualification and extension waivers for even the most benign of flying tasks, let alone building proficiency in complex mission execution. While other units face reconstitution challenges, the complex and reactive environment of CSAR leaves little tolerance for the degradation or lapse of proficiency in a high-end fight. Therefore, the solution is to look ahead to potential future conflict theaters and to alter CSAR employment constructs, timelines, and complements to accommodate these future environments. The standard set over the past decade that has required training in deployed environments also puts excess demands on aircraft and maintenance that are restricted by the phase-maintenance schedules of deployed weapons systems. The continuous deployment of rotary-wing CSAR platforms in

support of nondoctrinal mission sets have driven up flying hours on a limited number of aging airframes and leaders. As Colonel Pifer put it, leaders really "have to analyze the value of the hours you are putting on the aircraft."[17] A shift in deployed tasks and deployed CSAR compliments should be revisited to better position CSAR forces supporting conflicts in the future.

## Conclusion

## A Shift in Focus from COIN to CSAR, Alert to Training, Common to Exquisite

The conflict in Iraq and Syria has highlighted the need to refocus Air Force CSAR toward the doctrinal methodology for how the Air Force conducts PR, the core mission set tasked to support the branch. Doing so is essential to ensure that we have the necessary capabilities and resources in the future fight. The bottom line is that the previous 20 years of employing Air Force CSAR has largely been in conducting mission sets that should be conducted by the other services, in support of the principal components being employed. Much of Iraq and Afghanistan in OIF and OEF have focused Air Force CSAR capabilities on the doctrinal Army MEDEVAC/CASEVAC mission set in support of Army, Navy, Marine, and coalition ground forces.

What started as an insufficient number of the Army Dustoff MEDEVAC aircraft and crews in theater during OEF resulted in a tasking to the Air Force to provide three HH-60G Pavehawk rescue helicopters to cover the AOR encompassing Afghanistan. What began as a three-ship augmentation evolved into continuous Air Force CSAR rotations, in multiple locations, for decades, to conduct what was largely an Army MEDEVAC-aligned task. While obviously worthy of support and a huge source of pride for all Airmen involved, these types of enduring nondoctrinal Air Force CSAR taskings have led to problems within the CSAR community and the DOD PR enterprise as a whole. These problems include a lack of doctrinal focus and training on the CSAR mission set, significant maintenance impacts on the limited and aging fleet of specially modified CSAR HH-60G helicopters, and a reduced responsibility on sister services to build and maintain a PR force required to sustain support to lower tiers of PR taskings designed for each service.

The shift in mission focus from CSAR to CASEVAC has served to blur the nuances of each service's PR capabilities across the DOD and requires a refocus. Air Force CSAR has become mentally synonymous with the Marine Corps TRAP teams, Army MEDEVAC, and Navy maritime search and rescue. This perception is not only incorrect but also potentially dangerous. This is because the loss of clarification of capabilities has resulted in the insidious misappropriation or allocation of CSAR resources, starting in the COIN fight, and has slowly undermined the purpose of CSAR specifically as a core mission set of the Air Force. For the DOD to have a high-end, contested, combat-rescue force capable for a future fight, the Air Force should advocate to other military branches to regain and improve inherent recovery capabilities to support CCMDs for non-CSAR PR obligations. These differences can be likened to the employment of exquisite special operations forces early in a conflict that, over time, transitions to conducting conventional force responsibilities as the conflict progresses. The NDS-defined future fight provides clear recognition of the necessity of CSAR capabilities in a contested near-peer environment. As a result, clearly delineated expectations and requirements that differentiate branch-specific PR capabilities should be used to advocate for the employment of *specific* PR forces, with defined timelines, based on operational plan execution, for which they expect to be employed and trained. The first days and weeks of a near-peer conflict are likely to require significant differences in PR requirements from phase 1 and 2 operations to those of latter phases. This delineation would provide the justification required to define both the training requirements and deployed obligations assigned to Air Force CSAR forces.

OIR required the Air Force to employ PR forces for the CSAR mission for the first time in years. The COIN fight in OEF and OIF led to stagnation in the development within the CSAR community to be in line with the most current national defense strategy, national military strategy, and national security strategy. The PR experience in OIR provided several lessons discussed in this chapter and highlighted that CSAR should be reinvigorated to remain the high-end PR capability that it is doctrinally designated to be. As a result of this stagnation, the understanding of *how* CSAR forces are deployed has become a barrier to capability and capacity that must be updated based on newer platforms, tactics, and aligned with the anticipated nature of future warfare.

Examples from OIR demonstrate the importance of recognizing the nuances of employing the specialized and exquisite capabilities of Air Force CSAR by senior military leaders. CSAR is not only a core competency and doctrinal necessity, but it also holds a solemn promise to those military and designated civilians in harm's way. Chief among these is the need to understand mission risk and appropriate mitigation measures as applied to any strike package requiring PR, as correlated to the PR element tasked to provide support. This includes a thorough understanding of how risk mitigation measures are predicated on specific CSAR alert postures.

Next is the importance of delegated tactical-decision-making capability to units with strategic value. The goal is to build an understanding of the strategic and geopolitical landscape from senior leaders to tactical leaders, while ensuring mission execution efficacy is not unduly restricted by unnecessarily consolidated authorities. This requires improved communication of the strategic guidance through all echelons of command and the fusing of intelligence sources to tacticians that allow for strategically aligned decision-making.

The final lesson discussed is the importance of aligning specific PR capabilities across the DOD with the needs of the phase, nature, and current operational environment of the conflict. Doing so would allow for improved focus on training and availability of PR forces while preserving exquisite CSAR forces for the more complex nature of contested search and rescue. Additionally, unlike conflicts of the past, risk to the force will almost certainly limit available deployed training in future conflicts. This will constitute a significant challenge for HDLD rescue units to maintain sufficient readiness levels for enduring rotational deployments. If the lessons learned in OIR are applied moving forward, the competency of CSAR forces and efficacy of employment will be improved in future conflicts.

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Chapter 10

# More than "Bread and Butter"?

## The Marine Corps's Air-Ground Team in Operation Inherent Resolve

*Heather P. Venable*

Two critical events help foreground the role of the Marine Corps in Operation Inherent Resolve (OIR). First, the attack on the Benghazi embassy on 11 September 2012 that resulted in the deaths of the US ambassador to Libya and a Foreign Service officer suggested the need to respond more quickly to use military force to protect US embassies and respond to other emergencies as needed. Second, in 2014, the stunning advances of a violent and horrifying militant organization—the Islamic State in Iraq and Syria (ISIS)—as it swept through Iraqi cities as Iraqi soldiers, trained with billions of US dollars, fled in fear. Tired of committing blood and treasure, US President Barack Obama paused amid a rapidly changing situation, unsure of how to respond to the new caliphate ISIS set up as it gained more than 34,000 square miles of territory.

The 2012 event drove a change in how the Marine Corps employed some of its forces; long responsible for providing embassy security, it now increased its obligations to provide crisis response to embassies around United States Africa Command (AFRICOM). Established in 2013, the command rotates about 1,000 Marines through Spain and Italy where they remain ready to deploy quickly to threatened embassies.[1] The Corps formed a similar force to serve US Central Command (CENTCOM) in May of 2014, deploying in October 2014, known as the special purpose Marine air-ground task force–Crisis Response–Central Command (SPMAGTF-CR-CC).[2] As used in support of OIR, it went far beyond embassy protection as envisioned for its AFRICOM counterpart.[3]

This chapter argues that the employment of forces like the SPMAGTF-CR-CC may increase in future operations, becoming more common than Marine expeditionary units (MEU), which typically deploy with an amphibious assault ship (LHD), an amphibious transport dock (LPD), and a dock landing ship (LSD). Given the more fluid mixture of forces employed in SPMAGTFs and the in-

creasing need to remain dispersed with a small footprint in contested areas, this employment may increasingly challenge the crucial integration of the Marine air-ground team, a fundamental underpinning of the Corps' institutional culture.[4] Thus the Corps might argue that it offers an advantage over the 82nd Airborne, which also sent 1,000 troops to the region in a similar role.[5] The 82nd, however, lacked its own organic fixed-wing aviation capabilities. Indeed, both Marine artillery and aviation, for example, supported the fight in Mosul. But both did so as pieces of a larger joint fight in a way, with the simultaneous employment of separate capabilities not synchronized with each other as the Corps prefers. However, this may be part of a trend in which the aerial reconnaissance, offensive air support, electronic warfare, and command and control of aircraft are becoming more multifunctional.[6]

Most importantly, the Corps appears on the brink of departing from its long-term vision of using all its capabilities to enhance the employment of light infantry, especially in the pursuit of long-range fires, and SPMAGTF-CR-CC provides some precedent for considering the trajectory of the Marine Corps force structure debates. Some, but not all, of the resources used in OIR—including MV-22s, F-35s, and artillery—are precisely the ones being de-emphasized to allow for an increase in long-range guided missile employment.

Some of those resources enabled the SPMAGTF-CR-CC to function as a kind of land-based MEU, remaining on land over the deployment cycle but located in multiple countries at any given time flung over the region.[7] Given the Corps's close historical connections to the Navy, shaping so much of its history as a maritime army, this use is a double-edged sword for numerous reasons.

First, such a development clashed with the US Army, the nation's dominant land force. During OIR, funding remained relatively flat for the services at times except, notably, for the Air Force, which received increased resources.[8] Thus the Army and the Corps fought for the crumbs in Capitol Hill's budgetary battles while struggling in the aftermath of sequestration.

But its participation in OIR earned it the praise of the Department of Defense and the hope of increased spending. In one 2016 press release, Secretary of Defense Ashton Carter heaped praise on the Marines as the "beating heart of readiness" and stated his commitment to ensuring they received the high-tech equipment they needed, especially aviation capabilities brought by the F-35 and other platforms.[9]

This kind of recognition deeply serves the Corps's bureaucratic culture, which attempts to "demonstrate continued relevance by leveraging forward presence and furthering the idea of the Marine Corps as America's crisis response force."[10]

Meanwhile, the Army may not contest this mission as much, although it seeks to participate in each and every major land operation.[11] Yet it also understands that this kind of participation comes at costs, keeping it "trapped in an eternal present, deferring modernization and distraction" from preparing for future conflicts.[12] This dilemma is more strongly felt in the Corps given the reality that it has more strongly staked its culture on being a force in readiness.[13]

Still, the Corps's emphasis on the SPMAGTF-CR-CC helped, especially preserving its continuity in number of personnel, which sets it apart historically from the Army.[14] While the Army has fallen from around 1 million soldiers in 1971 to around 500,000 today, the Marine Corps has stayed relatively consistent at around 200,000 Marines.[15]

The SPMAGTF-CR-CC also had historical precedent in the Corps's "leading role" in a similar construct, the Rapid Deployment Joint Task Force that over time had once morphed into establishing CENTCOM in the first place.[16] The Corps's eagerness to seize these missions epitomizes its cultural tendency to "opportunistically" embrace "particular roles and missions" while tactfully remaining cognizant of not "encroach[ing] excessively on the core competencies" of the other services, particularly the Army.[17]

The Corps also historically draws on its organizational agility to deploy much faster than the Army, which typically required about 30 days to move large numbers of troops.[18] Essential to this construct is the idea of both air and ground working closely together. As seen in figure 10.1 below, the SPMAGTF is the smallest organizational version of the Marine Air-Ground Task Force (MAGTF), the primary way in which the Corps organizes itself for expeditionary service.

These scalable organizations bring together air, ground, and logistics units under a single commander.[19] They range from the largest form of MAGTF—the Marine Expeditionary Force with up to 90,000 Marines—to the ubiquitous MEUs of up to 3,000 Marines that continuously deploy around the world in six-month intervals. As the smallest of these organizations, the SPMAGTF can have a more specialized humanitarian mission than the MEU's more nebulous but primary mission to "promote peace and stability." The SPMAGTF-CC-CR, as

will be seen, was not only almost as large as a MEU but also participated in a wider range of missions beyond the more typical one of disaster relief. Indeed, reports of burning out barrels of M777 155mm howitzers suggest something more akin to a Marine Expeditionary Brigade's primary mission of small-scale contingencies.
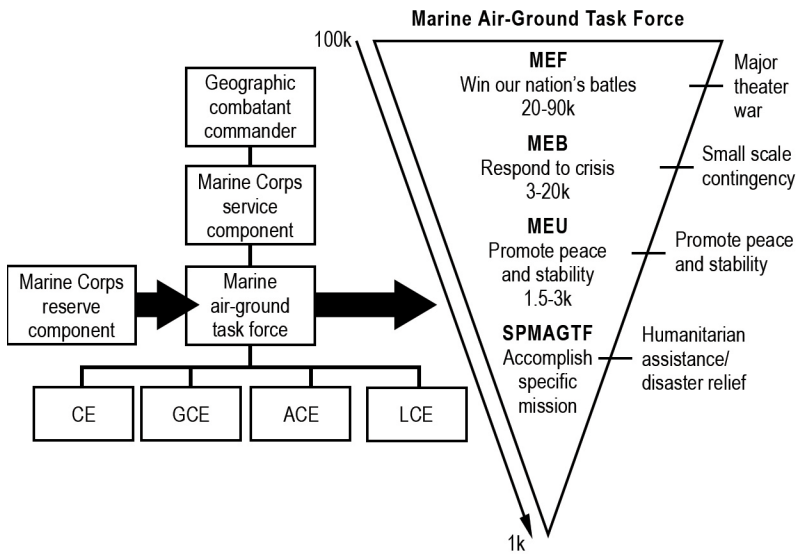


**Figure 10.1. Possible MAGTF organizations.** (Adapted from Marine Corps Reference Publication 1-10.1, 2016)

*Note:* ACE = aviation combat element, CE=command element, GCE = ground combat element, LCE = logistics command element, MEB= Marine Expeditionary Brigade, SPMAGTF = Special Purpose Marine Air-Ground Task Force

By 2014, then, the Corps had created a crisis response group specifically for CENTCOM, officially born on 1 October 2014, even as it continued to shed some excess troops from the more intensive years of the Global War on Terror (GWOT). If the SPMAGTF represented a "special-purpose Marine air-ground task force," it departed from the workup training typical of the more common MEU. Having participated in only one exercise before deployment, rather than the MEU's longer set of workup exercises, made for a bumpier path in theater.[20]

Operational by November 2014, the SPMAGTF-CR-CC, consisting of almost 2,300 Marines, deployed to the region, part of the almost 4,000 troops authorized to advise in Iraq and Syria in the first five

months of OIR. The following month, the SPAGMTF-CC-CR received unanticipated missions that dispersed its Marines over six different countries.[21]

Early on, the Corps viewed this distributed deployment as a key "strategy" for the Corps to draw on in future operations.[22] As SPMAGTF-CR-CC commander Col William Vivian explained, these operations portended future ones, highlighting the "unbelievably wide variety of things" that kept his Marines busy, one not equaled in his previous experiences.[23]

Those wide-ranging missions initially included Marines either providing embassy security in Baghdad or training Iraqis at Al Asad Airbase, with Marines remaining on base during Iraqi operations.[24] The SPMAGTF even included a forensics lab to analyze pieces of evidence from Islamic State fighters gathered by Iraqi soldiers.[25] It also provided "steady-state response[s]" as necessary, defined as able to meet requests within six hours of notification. Aircraft, however, tended to provide faster responses within about 30 minutes. The force also had trained for TRAP, or the tactical recovery of aircraft and personnel, with three Ospreys in Kuwait (the MAGTF had a total of 12) continuously ready to fly missions. [26]

Other Marine aviation assets included ground attack by 12 AV-8B Harriers and electronic warfare sorties by six EA-6B Prowlers. Other supporting aircraft included MV-22B Ospreys and four KC-130J aerial refuelers that also provided medical evacuation and supplies.[27]

Over the course of the MAGTF's first half year of operations, Marine airpower killed about 600 fighters and destroyed 60 fighting positions and more than 100 vehicles.[28] All airpower assets in the region averaged around 60 bombs dropped per day as well as an average of seven strikes per day from late 2014 to mid-2015, with that number beginning to drop in September with the arrival of Russian troops.[29] Over about the next six months, the MAGTF flew over 8,300 flight hours while transporting more than 2.8 million tons of cargo and bombing ISIS.[30] Simultaneously, ISIS ramped up its conventional defensive efforts.[31]

The Marines, in concert with others contributing to the joint fight, made enough progress that, by mid-May 2015, OIR officials announced that ISIS's strategy had shifted away from offensive "large formations" to smaller groupings of more defensive fighters who focused largely on maintaining the territory it had acquired, in addition to smaller "localized harassing attacks" with "occasional complex or high-profile attacks" to receive attention. Airpower, for example, en-

couraged ISIS fighters to don the uniforms of Iraqi security forces to avoid being targeted, providing what one general described as the "most complex area of battle" he had seen.[32] By this time, a Marine-Brig Gen Thomas Weidley, had been appointed chief of staff of OIR's Combined Joint Task Force (CJTF-OIR). Two days later, on 17 May, Iraqi security forces fled Ramadi, even with air support, as about 800 ISIS fighters launched an offensive.[33]

The Corps's activities in the region also morphed and grew as the first members of the SPMAGTF returned home, replaced by Col Jay Bargeron and his Marines in April of 2015. At this point, the MAGTF shed some of its train-and-advise missions, which became the responsibility of Marines trained specifically for this mission. But the SPMAGTF continued to provide air support, various training, embassy protection, and other responsibilities.[34] Of the about 3,000 troops deployed to support and assist Kurdish and Iraqi security forces, the Marines notably continued to play a leading role given the almost 2,300-person SPMAGTF.[35]

The Corps's role expanded in March of 2016, as about 200 Marines began operating from an "artillery outpost" in northern Iraq as part of Task Force Spartan. Located at Fire Base Bell, this outpost—the first "quasi-permanent presence" outside an Iraqi base since 2014—quickly came under attack, causing casualties, after which the Corps acknowledged its existence for the first time.[36] From the perspective of the Joint Chief of Staff's Marine Gen Joseph Dunford, this artillery support was "no different" from previous "aviation fires."[37] But his view is problematic considering it can be based further away and still brought to bear relatively quickly. It also reflects the Corps's predominant view of airpower: it is akin to flying artillery, a view the Air Force historically has eschewed except in emergencies.

Moreover, despite statements suggesting this artillery would be used only to provide counter-battery fire to protect a nearby Iraqi base, Marines quickly began using it offensively. On 21 March, US military officials stated that they only envisioned Marine artillery being used for "force protection," but four days later, Marines began using it in support of the offensive against Mosul.[38] In preserving the element of surprise, though, there is no need to go to tortured lengths to make unconvincing arguments, as did one official who tried to claim Fire Base Bell was "not a combat outpost because" of its location "behind the front lines," despite the fact that ISIS fighters had already attacked it.[39] By 4 April, military officials claimed that Fire

Base Bell was not even its name, now referring to the artillery outpost as the Kara Soar Counter Fire Complex to stress its "support role."[40] Yet the Corps paid for its involvement in the region until early 2017 by making up half the casualties in the region for a total of 15 out of 30.[41]

In addition to artillery, short-legged Harriers participating in MEUs provided additional support in Mosul. Harriers attached to the 13th MEU, for example, flew 45 missions around Mosul over the course of almost a month, including against fighting positions and other tactical targets in 2016.[42] Again, though, the commitment of these air and ground capabilities represented a piecemeal application of Corps assets rather than a combined-arms approach benefiting from the close integration and strong relationships that the institution fosters through training and other arrangements.

In softening Raqqa in preparation for taking ISIS's capital city back in 2017, about 400 Marines from across the 11th MEU's MAGTF emulated their predecessors at Fire Base Bell, spending about two months firing massive amounts of artillery and other weapons into the city as requested.[43] Other Marines participated in activities characterized by military officials as simply defensive, "conducting security within their area of operations" rather than participating in "presence patrol[s]."[44]

Having retaken most ISIS-held territory, Task Force Lion—the fifth rotation of the SPMAGTF concept—stood up with all four services in addition to seven coalition nations in late 2014.[45] It focused primarily in supporting Iraqi efforts to clear those urban areas located in western Anbar's Middle Euphrates River valley, some of the last centers of operations held by ISIS. These efforts required creating "three forward-positioned, expeditionary firebases and command centers" while the task force participated in almost 100 movements progressing more than 11,000 miles.[46]

In the latter years of the fight against ISIS, Marine aviation also brought its newly operational F-35s, such as Marine Fighter Attack Squadron 211 (VMFA-211), which deployed with the 13th MEU in parts of 2018 and 2019. Predeployment training focused both on preparing to provide support in the form of Marine aviation's "bread and butter" role of close air support (CAS) although it also participated in "higher-end training and mission sets." Once in theater, the F-35s "provide[d] over 800 hours of CAS and defense counter air" in addition to greatly improved situational awareness to those on the ground.[47]

Task Force Lion's commander, Colonel S.W.B. Folsom, believes that the Corps could have provided more significant assistance to the joint fight by becoming part of the CJTF-OIR. Instead, the Corps "piecemealed [its] contribution in the form of individual augments to CJTF" and "purpose-built task forces" like the ones he commanded.[48]

In some ways, the Corps's institutional culture remains resistant to this approach, continuing to "ensure that as much of the MAGTF remains under MAGTF command and control as possible when operating as part of a joint task force," in part—it argues—because of the close relationship of air and ground.[49] This tendency to retain control over its own capabilities whenever possible has manifested itself repeatedly over the Corps's history, including on the drive to Baghdad in Operation Iraqi Freedom in 2003, when the Corps pushed back at "coming under the control of Army's V Corps headquarters."[50]

Also going against the grain of the Corps's institutional culture, the SPMAGTF—consistently seen as a land-based force to which the Corps added aviation support from repeated MEUs—provided a tension point, not only with the Army but also within the Corps, given its unease over its continuing land-based commitments during the GWOT. Should it focus on counterinsurgency and in many ways replicate some of the Army's responsibilities, or should it return to its more amphibious role closely tied to the Navy?[51] Such a refrain was heard frequently even during the early years of Operation Iraqi Freedom, and this point continued to be voiced over the next almost two decades.[52]

In the future, as already suggested, the Corps may shift away from its historical focus on infantry to place more emphasis on aviation and artillery, and its role in OIR certainly provides some precedent for this view.[53] Yet these capabilities, especially aviation, are extremely costly, thus challenging the Corps's historical emphasis on "doing more with less."[54]

As OIR wrapped up, the Corps's 37th commandant, Robert Neller, hoped to refocus on littoral operations, particularly in light of the potential for the Corps to become more deeply involved in urban warfare beyond "lower level tactical work such as room clearing exercises."[55] Such a shift would require Marine formations to be reorganized for an urban rather than a rural fight. Another ongoing concern for personnel was the competition with special operations forces, which has assumed some of the Corps's traditional light or general-purpose infantry roles that has left some Marines feeling underutilized in combat.[56]

Today, even as the US seeks to pivot to the Indo-Pacific region, the SPMAGTF-CR-CC continue to exist as a crisis response force.[57] While some might argue that these crisis forces prevent Marines from focusing on the pivot to Asia, others argue there are many similarities between how the Corps would employ forces in both. As one author describes it, "small units are spread hundreds of miles from their parent commands and linked only by satellite communications and V-22 Ospreys," which have extended reach due to the KC-130's refueling capabilities.[58]

The Corps's 38th commandant, who assumed command in the summer of 2019, has taken a different approach than Neller in seeking to restructure the Corps's capabilities, shedding some to invest in others. These include some capabilities employed in OIR. In light of concerns, including how much the costly F-35 can contribute to the MAGTF given its short range, Berger sought to cut 108 fighter and attack aircraft and helicopters and replace them with more aerial refuelers and unmanned aerial vehicles (UAV); the latter would create 100 percent increase in the number of squadrons.[59]

Proposals to employ airpower in a contested environment include using "guardian angel" UAVs to better integrate the MAGTF to enable "communications, fires, and maneuver between all elements—at once connecting friendlies and disrupting enemies" in a kind of resilient network.[60] As such, these improvements will build on organizational changes, such as the SPMAGTF's Combined Arms Coordination Center (CACC), which functioned as a clearinghouse to help improve the synchronization of kinetic and nonkinetic effects to make them more "mutually supporting" while correcting the arguable overemphasis on kinetic effects at the expense of nonkinetic.[61]

Also notably, considering the Corps's contributions to OIR, artillery will receive a diminished role in the Corps's envisioned force structure. It envisions decreasing artillery by 76 percent, in exchange for more mobility in the Pacific maritime domain, with long-range missile batteries rising by 300 percent.[62]

Still, the Corps anticipates dispersing small units in the Pacific as it did in the SPMAGTF, although these employments have been envisioned in more conventional great-power conflict in terms of shifting organizationally toward Marine Littoral Regiments that will be able to "accomplish sea denial and control within contested maritime spaces."[63]

Meanwhile, some might argue that the competition between the Army and the Marine Corps endures, perhaps prompted by the success of the SPMAGTF. In the middle of 2016, for example, General Mark Milley embraced a competing vision for security assistance when he created the security force assistance brigade, deploying the first to Afghanistan.[64] Similarly, by 2018, the Air Force began seeking to develop a Coalition Aviation Advisory and Training Team.[65]

As the US Marine Corps shifts gears to prepare for more highly contested maritime conflicts, some have asked whether or not it will remain capable of fulfilling the range of missions it did in SPMAGTF-CC-CR and elsewhere.[66] Initially not receiving the kind of comparable training of its sea-based counterparts in the MEU, the SPMAGTF-CC-CR flexed and evolved as required to support coalition operations broadly across the region.

In doing so, the SPMAGTF—originally designed primarily to support humanitarian and other missions in uncertain environments—morphed into something more akin to a land-based MEU in some ways while diverging in others. If the MAGTF rests on the idea of aviation and logistics supporting Marines on the ground, then Marine aviation provided a wide range of support, but not quite as Marines would prefer, of Marine infantry. Artillery also advanced coalition efforts but not in concert with the combined arms philosophy of the MAGTF.

Still, the dispersed nature of Marines within the MAGTF presaged a future vision of small units of mobile troops deployed across a region, even if the same high-tech aviation and artillery assets that were used to such good effect are precisely some of the assets currently on the chopping block, regarding the Marine Corps's future vision of supporting the Navy in sea control and denial in the Pacific.

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Chapter 11

# Data Fusion as Software Solution for 2018 OIR Lessons Learned and JADC2

*Brent N. Harms*

## Introduction

In 2018 Chief of Staff of the Air Force General David Goldfein directed the Air Force Lessons Learned (AFLL) directorate to conduct a high priority collection regarding "Air Operations and Support to Operation Inherent Resolve (OIR)." The resulting report focused on numerous lessons from United States Air Force (USAF) contributions to OIR, specifically on Operation Eagle Strike (battle of Mosul) and Operation Shiraka (defeat of Da'esh in the middle Euphrates River valley) between February and March of 2018. To ensure streamlined efforts, AFLL used three questions to orient its focus of research:

- Was Joint Task Force/OIR supported with, by, and through defensive counterair (DCA) via suppression of enemy air defenses, command and control (C2), and counterland missions with close air support?

- Was there provision for effective operational support, intelligence, surveillance, and reconnaissance, and lethal and nonlethal fires to ground maneuver?

- Did the USAF address, plan for, and engage air advising as an emerging mission, and how did the air component enable ground force advise, assist, and accompany roles in Iraq?[1]

This chapter focuses on the first two questions above. By analyzing OIR lessons learned with capabilities available during this time, such as Talon Thresher, which is discussed later, I will show that data fusion and software solutions were available for employment during OIR in 2018. In conjunction with highlighting current solutions, my analysis will increase software solution awareness for future opportunities toward multi-domain or joint all-domain command and control (MDC2/JADC2). By explaining data fusion and techniques using data fusion, my recommendations will support current and future conflicts for better management of assets and amplify C2 capabilities.

## OIR Lessons

Of the OIR lessons learned in the 2018 AFLL report, six identified items dovetailed into data fusion solutions. The first lesson revolved around strike cells providing adaptive C2 elements, but a lack of standardization resulted in operations and training challenges. The combined air operations center (CAOC) during Operation Strike Eagle established an ad hoc construct, named "strike cells" during Operation Shiraka, which were built with minimal guidance in joint, service, or multiservice doctrine to expedite the nondeliberate target process. Because of the lack of standardization and despite being tied to the combat operations division, the new "strike cells" blurred command relations, which led to decisions that suboptimized airpower employment. The following vignette highlights operational area boundaries drawn by the target engagement authority without adequate coordination across the operational area.

A forward deployed director of operations (DO) is overseeing the day's efforts and the status of targets while inside the combat operations division. The DO is inside an ad hoc "strike cell," which is located on the combat operations floor and tasked with monitoring targets off the joint targeting list in the assigned area of operations. Special operations forces (SOF) are on a mission and the joint task force (JTF) commander is requesting combat air support during SOF ground movement. The DO is not aware of the exact position of the SOF troops nor if a request had processed off the air tasking order (ATO) to send assets to support this seemingly no-notice JTF request. The DO requested combined forces air component commander (CFACC) approval for assets to provide close air support (CAS) to the SOF team. As aircraft maneuvered toward the SOF, the chief of combat operations reshuffles the ATO and builds space to fill gaps and briefs the DO on adjustments. Just then, a valid, time-sensitive target appears from an unarmed information, surveillance, and reconnaissance (ISR) asset that is in the same sector as the SOF team. The DO retasks another armed asset in the vicinity of the ISR platform and notifies the CFACC for authorities to strike. The CFACC confirms with his staff and the joint terminal attack controller (JTAC) for a collateral assessment. The target was in the open desert with no buildings or additional people traveling and was a valid target within boundaries of the contested environment with low collateral. The CFACC then directs the JTAC to push strike authorities and modifies

9-line information to conduct the strike. The strike asset confirms the location and deconflicts airspace to maneuver for attack. The CFACC notifies the JTF commander that they have a target in the open near their CAS and were attacking a target. The JTF commander reports back that the CFACC's target was the JTF's target, and they were intercepting for a capture instead of a kill under target engagement authority. The CVACC aborts the strike withing seconds of launch and watches the ISR video feed as the SOF troops captured the target in the open, with no friendlies injured, and releases armed overwatch. After the mission, the JTF commander and the CFACC meet and discuss blurred command relations and suboptimal airpower employment without adequate coordination across the operational area.

The fog and friction of moving fast created issues with execution authorities and control of strike assets but still gained positive results. The AFLL team recommended an organization solution for a flexible option to provide doctrinal capabilities to C2 elements for nondoctrinal application within a specific operational environment.[2] Instead of an organizational change, software solutions, in the form of data fusion, would display strike assets and visual operational boundaries on a common operating picture.

A similar, but separate, lesson identified was the lack of continuity and expertise of the special operations liaison element (SOLE) in coordination and integration between the air component and special operations joint task force. There was a lack of interface to prevent the potential for fratricide and coordinate appropriate fire support for SOF, air, surface, and subsurface operations. An additional lack of SOF operations in the ATOs and airspace control orders contributed to this lesson to coordinate and deconflict with the air component. This applied not only to US SOF but also to coalition SOF operations between the joint air operations center (JAOC) and SOF headquarters with conventional air. While dynamic targeting and accelerated strike cells were active, the lack of integration and identification of real-time restricted operating zones (ROZ) increased risk. The AFLL team recommended an organization solution for sustained, habitual SOLEs assigned, similar to the battlefield coordination detachment model, with consistent presence to provide better communication.[3] However, as above, fused data on a common picture with Blue Force Tracking of soldiers and low probability identifications for SOF aircraft would provide increased awareness. A common, integrated picture does not remove the need for communication from the SOLE,

but software solutions are available. These solutions could also integrate Army artillery path of fire and impact and provide a quick representation of activated ROZs.

Three additional lessons identified limited levels of coordination and changing intents between area air defense commanders (AADC) and battle-tracking partner forces in congested airspace. These lessons centered around time constraints to plan, coordinate, and execute DCA, including real-time battle management of sectors that the AADC was controlling. During OIR, the proximity of pro-Syrian regime air forces to US coalition aircraft drove an extremely fluid situation that demanded a higher level of risk acceptance during operations. As the battle space changed, the C2 and intelligence teams were assessing the air order of battle while waiting for confirmation of friend or foe identification. The common operational picture (COP) was incomplete; C2 relied heavily on voice communications to track and identify aircraft. One commander during the battle of Mosul mentioned there was no data link in or over Mosul, which complicated matters. Without an automated airspace picture, the situational awareness slowed to the speed of relayed voice communication for target recognition and manual updates to the COP. The AFLL recommendations emphasized both training, regarding roles and authorities, and material, regarding hardware engineered for a specific operation.[4] However, software solutions were available for immediate use during this time for battle-space awareness—in the air and ground—with existing hardware. Data fusion techniques with existing Automatic Dependent Surveillance-Broadcast (ADS-B) commercial off-the-shelf software would have heightened air awareness. ADS-B does not have an identification, friend or foe (IFF) interrogator; however, ADS-B would have shown aircraft using Global Positioning System satellite information with limited details for early awareness. Combined with additional data available and a drawing tool for identification concerns, it would deconflict civilian or International Civil Aviation Organization abiding aircraft. This at least would provide a timely alignment of resources and intel requirements for possible threats to a base or aircraft.

The final lesson learned was integrating nonlethal effects with Joint Task Force planning cells that electronic-warfare and all-domain components may not be aware of for better dynamic support through fused capabilities. An increased integration of capabilities during joint and component planning can enhance target development and

exploitation.[5] While integration can leverage organizational and doctrinal solutions through imbedding liaisons or synchronized planning, organizational and doctrinal solutions fail to represent future challenges. Understanding the environment is essential, and increasing awareness will be paramount in future conflicts. Data fusion techniques provide levels of confidence and highlight additional needs to refine objective analysis, which will aid in cuing sensors. With limited resources to achieve desired effects, a method to allocate or adjust support is essential for time-critical data tied to justification and priority for appropriate authorities. Deploying individuals with classified capabilities "just in case" is not feasible until a process identifies the justified requirement. Data fusion integrated into planning will support cuing data appropriately with the correct sensor or desired effect to enhance understanding of the operational environment.

## All Datum Is Noisy

Without the capability to cue data resources, seemingly all that surrounds analysts and the warfighter is noise.[6] Unique platforms built specifically for a single type of information gathering leave windows of opportunity closed without fusing all capabilities into an all-domain awareness. Without tying all available information into a fused system of systems, data may be overlooked or lost due to latency. While in Iraq, General Stanley McChrystal faced both issues of lost and overlooked data from the amount of information taken from raids and stacked in a closet waiting for analysis.[7] These circumstances revealed how much data we have, what is lost, and how data fusion can link and retain details for current or future queries. Data from a sensor is processed information, and when combined with similar information, it creates knowledge that humans can infer or learn something from.[8] Data is also time sensitive. Without added technology to process, link, and manage it, it runs a risk of losing its useful information.

Data fusion can take processed information or raw information from a sensor and increase the processing speed to correlate information. Sensors that provide specific analysis, such as a radar warning receiver (RWR), can speed up data fusion. A sensor can passively detect, run signals through a processor, deconflict from an onboard database of signals, and resolve ambiguity for the operator. Humans are accus-

tomed to relying on machines in time-critical situations to give us their best estimates versus waiting on an analyst. Instead of an analyst listening to a pulsed repetition frequency and using their own memory to discern a signal, a machine can do so in seconds.[9] However, confidence in machines requires time to build through repeated human interactions that validate and manage logic responsible for processing data accurately. Data fusion is no different. Calculated risks between speed and accuracy, based on desired effects, will require similar confidence building. As humans work to build confidence in new methods of combining information with knowledge, data storage is essential. Not only is storage vital for the massive amount of digital information available but also for arranging information into the varied typology that visualizes data to make it useful.[10]

## Data Fusion Explained

To provide a meaningful representation of fused sensor output, an understanding of multi dimensional information derived from sensors through data fusion techniques needs discussion. Suggested recommendations to OIR lessons learned are based on technological advances using network capabilities and sensor integration. An overview of data fusion techniques and software algorithms used to interpret and cue sensor data will extend into future MDC2 applications.

Data fusion combines information from multiple sensors and related details from databases to improve interpretations instead of using a single sensor alone.[11] While the use of data fusion is not new, technology in new sensors and processing hardware, along with software techniques, makes real-time fusion possible.[12] Today, data fusion systems are used for target tracking, automated target identification, and limited automated reasoning applications. Over the past five years, the Department of Defense (DOD) has advanced data fusion applications to an emerging engineering discipline with standard terminology.

Applications for remote sensing, automatic threat recognition, and IFF use multisensor data fusion.[13] Data fusion provides significant advantages and reduces error in location or effect when identifying an object based on observed attributes.[14] These attributes observed include direction, range, velocity, or radar cross sections to classify

target identity and, with respect to the observer, determining intent of the target (e.g., threat or no-threat).[15]

The determination of position and velocity from a noisy environment creates a statistical estimation problem.[16] Techniques such as the Kalman filter apply estimation from attributes and a labeled identity from pattern recognition techniques based on clustering algorithms or decision-based methods such as Bayesian inference.[17] The interpretation of a target's intent involves automated reasoning using understood and obvious information from knowledge-based methods such as rule-based reasoning systems.[18] Approaches based on Bayes's theorem relate the probability of a hypothesis occurring given observations or features already occurring.[19] Bayesian methods enable the inclusion of past probabilities that are known and updated based on current observations.[20] The Naïve Bayes classifier is common for inferring activity from sensor data.[21] Despite Bayesian inference identification performing well, an argument against it is it assumes independence between attributes.[22] The assumed independence of attributes brings about competing hypotheses that are mutually isolated due to independence and is considered a weakness.[23] The arguments are based not on how humans assign belief, but how they allow logic to rule out less-than-likely outcomes for a better representation of data by providing confidence levels. In practice, when building any data fusion system for a specific application, programmers must include additional analysis techniques.[24]

**Data Fusion Process Model**

Historically, technology transfers have had barriers due to a lack of unifying terminology. In 1986, system developers from the Joint Directors of Laboratories (JDL) Data Fusion Working Group codified terminology to improve data fusion in connecting military applications and communications.[25] The result was a Data Fusion Lexicon and a process model that is a two-layer hierarchy for data fusion shown.[26] The JDL process model is very general for a functionally oriented model of data fusion intended for use across multiple applications.[27]

The conceptual JDL model identifies process, functions, categories of techniques, and specific techniques related to data fusion.[28]

In addition, each component can break down into subprocesses.[29] For example, level 1 processing is divided into four types of functions: data alignment; data/object correlation; object position, kinematic,

and attribute estimation; and finally, object identity estimation. The object position, kinematic, and attribute estimation functions are further subdivided into system models. At the lowest level, a Kalman filter or other multiple hypothesis trackers perform each function to resolve any ambiguity.

The JDL model described is generic and intended as a basis for common understanding. The separation of processes into Levels 1–4 is artificial, and during data fusion, it integrates and combines functions into a processing flow. To improve the process even more, an ordered arrangement identifies categories of techniques and algorithms performing the identified functions.[30]

Finally, interpretation of fused data for situation assessment requires automated reasoning techniques that leverage knowledge-based systems to interpret level 1 processed results.[31] The goal in building an automated reasoning system is to capture human expertise by specifying rules that represent the essence of the informative task.[32] Within a knowledge base, an inference or evaluation is developed to use knowledge in a formal process detailing how to use the knowledge base to gain a conclusion or estimation. Deep learning offers an alternative approach at multiple levels of a deep network by training machines based on an abundance of data.[33] This approach is already underway in the Air Force tactical exploitation of national capabilities (AF TENCAP) programs with potential to populate results into a knowledge management tool to increase predictive analysis.

The amount of knowledge needed to capture reasoning on an event or action is vast. Information requires a repository that leverages rules assigned to algorithms to ensure fused data provides the best estimation or conclusion. This means the most extensive support function required in supporting the data fusion process is data management. Data management provides access to, and management of, databases for retrieval, storage, protection, and related queries for data fusion. Elastic computing solves the problem of the particularly large amount of sensor data ingested and required for rapid retrieval.

## Elastic Computing

Elastic computing or cloud-based technology solves storage and retrieval of data from cuing issues and supports different typology for visual depiction of data.[34] Developed out of physics and economics,

the term elasticity in computing refers to the ability of a system to automatically allocate and reallocate computing resources on demand as computing demand changes.[35] The concept of elasticity has transferred to the context of cloud computing. Driven by a customer's need, elasticity shares computing power with other resources and scales capacity.[36] Elasticity can also manage, measure, predict, and adapt applications based on real-time demands placed on resources using a combination of remote computing resources.[37] Scaling a system and the ability for a system to sustain increased workloads with adequate performance make elastic computing unique to data management along with computing applications.[38] This shift from mainframe to client services integrates globally distributed resources into seamless computing platforms, ensuring that if one center loses power, the other servers can automatically pick up the computing load.[39]

Clouds or elastic computing capability have five characteristics that provide data fusion some powerful tools: on-demand self-service, broad network access, resource pooling, rapid elasticity, and measured service.[40] The benefits of elasticity for the combat cloud are immense and a great step toward amplifying capabilities. The ability for data fusion in a web viewer that originates from elastic computing means more storage of data and access wherever members are located with web connectivity.[41] There is no longer an information technology problem keeping software or servers up to date, allowing organizations to use manpower effectively, or innovating in a flexible medium for applications in computing methods.[42] The only responsibility for the client is paying for the utilization of the service.

## Talon Thresher

A history of Talon Thresher begins in 2012 with a team from the AF TENCAP that set out to provide a tool for the warfighter on airborne threats.[43] The mission of AF TENCAP is to provide warfighter capabilities by exploiting current and future space and air-breathing national, commercial, and civil systems as quickly as possible. AF TENCAP assists commanders by providing situational awareness for decisions while providing intelligence preparation of the battlefield, targeting assistance, and threat location and avoidance tools for the tactical warfighter.[44] The idea of Talon Thresher matured between 2013 and 2014 and was ready for small trials in 2016 for Pacific Air

Forces (PACAF).[45] Talon Thresher used previous niche concepts designed to present centralized fused data at the highest level of security but leveraged sanitization for real-time use at the warfighter level.[46]

Since 2012, technology has developed elastic computing and cloud-based services as the centralized fusion hub for stored data. Using cloud capabilities, the information is scalable and uses commercial management similar to that used by Twitter and LinkedIn for reliable access and data protection.[47] As stated previously, fusion through Bayesian inference gives the best assessment or estimates based on collaborated information from sources. Sanitization then helps to mitigate classification to the lower evaluation due to plausible-deniable attribution (e.g., visual observations, open-source news, or Twitter).[48] Estimates on knowledge, sources, or evidence fused together include dissension efforts, which aids in the human assumptions and judgment for comfort in data presented.[49]

The AF TENCAP team designed Talon Thresher to be both a COP and common intelligence picture (CIP) instead of two programs, one for operations and a separate one for the intelligence community.[50] Talon Thresher is a blend between Title 10 (role of armed forces) and Title 50 (role of intelligence) because it uses sources from both and fuses data for each directorate to work from one picture.[51] There are four elements needed for situational awareness that helped develop Thresher's strategic framework: 1) Accountability (track custody); 2) Identification (consistent); 3) Activity (relationship between accountability and what the platform is doing); and 4) Predictions (what will element do next? Redeploy, logistic mobilization, etc.).[52] A fifth effort added is cuing, or information management to resolve ambiguity based on today's technology and use of air, space, and cyber tools. The fifth effort highlights the importance of the right information at the right time and managing unique assets for a holistic approach instead of stovepiped for one use.[53] This fifth effort is essential for C2, giving priorities to all sensors by cuing to aid, find, and fix, but this effort requires a consolidated picture to display for the warfighter.[54] Because of limited resources in OIR, cuing and sharing information was rudimentary at best, and task forces exhausted internal resources by way of aircraft and manpower due to centralized control and execution of owned sensors. Finding the right data and protecting it are critical, but how does one get more data if their air component or joint force commander does not own their own data or sensors? Better

sharing of information is what Talon Thresher set out to solve. This capability has significant growth potential.

As previously discussed, all datum is noisy, but once processed, information can provide greater inference through behavior-based identification. In the RWR example, Talon Thresher uses the RWR processed information, then estimates through logic from a machine database of behaviors for precise identification. These behaviors include acts like a formation, appears as a reconnaissance or tanker orbit, or moves laterally to align an inertial navigation unit for a radar guided missile shot. Any one of these behaviors, between contextual and kinematic features, provides fused data with better resolution and confidence to identify a questionable target or anticipate a target's future actions.[55] This is where Bayesian and behavior-based identification is useful to provide estimates for the human interaction on the best deduction that the machine resolved from multiple pieces of processed information.

During development of Thresher, AF TENCAP leveraged relationships between the National Reconnaissance Office (NRO) and other agencies over competing assets as a successful pathway between Title 10 and Title 50. Thresher was a collection orchestration for operations to C2 during hostilities and developed a "declare" application for additional information to determine if an act was aggressive or not.[56] An interactive identification gave the same interface for authorities to gain or cue required information on details of the platform in question. To be clear, Talon Thresher is an air-centric interface, but there are applications for maritime and ground forces that sister services can leverage. Talon Thresher is a web-based program that can overlay or blend with similar web-based programs for a global analysis from every service.[57] The web-based program uses log in tools and radio buttons to declutter visual displays, which leverage intuition to overcome Talon Thresher's complex program. Web-based capabilities also promote coalition integration through a second party gateway with considerations imbedded for partner-nations.[58] In the interest of sharing information, data protection is a primary concern under Talon Thresher's program, and it utilizes sanitization protocols to protect and display data at the appropriate level.

To protect data during fusion, the Talon Thresher team developed a high-level, secure, cloud-based repository that can sanitize information down to the lowest acceptable security level of secret. The cloud-based system gives the ability to add, change and upgrade, or

correct information while inside. The cloud repository also leverages future capabilities of machine learning but, more importantly, provides curators an opportunity to update information based on human knowledge, behavioral changes, or forensic analysis.[59] Having the cloud and fusion at the same level provides for object-based production or one object displayed from multiple sources and sensors.

The machine in the loop provides logic-based sanitization with machine-level track messaging, plausibility, and uncertainty.[60] Detailed reports have "tear lines" that provide a sanitized version of classified activities while protecting sources; these "tear lines" also exist in data. Protocols set within machine logic ensure that the machine strips out methods or sources before displaying classified information at the appropriate level. The machine can then estimate further through logic if "plausible" data exists that the object could have a nonclassified reporting source. Fused data from Link 16, partners, and open-source intelligence (OSINT) aids in tailoring releasable levels, instead of a data owner bookkeeping or denying releasable data for any reason.[61] The sanitization protocols built between AF TENCAP, NRO, and other agencies bolstered trust and solidified relationships by supplying data into the AF TENCAP cloud.[62] These relationships are not only a success story of collaboration between agencies and partners, but they also provide new methods in protecting data for future requirements. By using plausible attribution of nonclassified reporting and fusing with OSINT, Thresher provides timely estimates based on sources. Uncertainty integrated into sanitization also provides an additional level of data protection by changing or limiting the number of coordinates (10-digit grid to 5), timing (lag or predictive), or refresh rates to protect sources.[63] Through a machine logic base from sanitized rules of track messaging, plausibility, and uncertainty, protected data is releasable at an appropriate level for both the warfighter and intelligence analysts. Having solved some internal issues with classification, this same construct could alleviate information sharing.

## War Fighter Use of Data Fusion

At Fort Liberty in North Carolina, the Joint Staff J7 Joint Interoperability Division teaches two courses essential for the war fighter and commanders overseeing battle space. They train joint integrated

control officers (JICO) and joint data network operations officers (JDNO) in duties assigned to a CAOC or JAOC for commanders' situational awareness and managing data feeds. The JICO is responsible for nontactical and multi-tactical data links to communicate and exchange information between sensor operators along with resolving any ambiguity during fix and track of airborne assets on a COP. JICOs link in with the joint interface control cell, which develops and manages the multi-tactical data-link architecture.[64] The JDNO manages all data feeds assigned to a CAOC or JAOC. These data feeds can be from any sensor, radar, weather, or unmanned aerial vehicle. The JICO course has been available for over ten years, but the JDNO course has had a varied tenure and was recently reinstated from a four-year vacancy.[65] Only 60 JICO graduate a year between all services, and building subject matter experts on COPs and deciding how best to manage or build future information displays takes time. There are no software solutions discussed in training, and the two courses remain separate. Nevertheless, JICO and JDNO training is vital to current operations, but they may perish if training does not adapt and integrate with software solutions through data fusion for operational use.

United States Air Forces Central (AFCENT) has employed data fusion in the past, including Talon Thresher and additional programs. Maj Gen Chance Saltzman, then the AF deputy combined forces air component commander, led the Enterprise Capability Collaboration Team responsible for MDC2 design. General Saltzman leveraged his space and research experience on the subject to amplify what resources were available to increase awareness in his CAOC. In the past five years, there have been major advancements in data fusion and visualization within the DOD.[66] AFCENT is utilizing these advancements with commanders' awareness and requesting teams to learn and employ new programs. With training from AF TENCAP, teams forward could have provided data to tactical elements and, through consistent education in understanding the information, believed the information presented. The running theme for teaching crews on interpreting data is "the absence of intelligence data does not mean an absence of activity."[67] AFCENT is not using Talon Thresher as a COP because of latency issues and classification restrictions among coalition partners in a CAOC. AFCENT sees Talon Thresher as a vital supplement to awareness and may provide future common architecture for coalition aircraft and ships.[68] As time and requirements prog-

ress, the AFCENT team continues to work with agency partners to differentiate and correlate activities along with increasing bandwidth for tactical C2 assets. AFCENT leadership is leveraging data fusion and capabilities that will test future concepts while applying innovative software solutions appropriately.

Another location that is utilizing Talon Thresher is the combined United States Air Forces Europe and Africa Command's 603rd Air Operations Center (AOC). Unfortunately, with coalition partners established on their floor, Talon Thresher and other data feeds are in the sensitive compartmented information facility with the senior intelligence duty officer (SIDO) and intelligence, surveillance, and reconnaissance director. The 603rd trains new analysts on Talon Thresher and uses it more as a CIP instead of a COP, which is not the original design for Talon Thresher.[69] The intelligence community, using a program designed for operations more than the operators, highlights which directorate is aware of capabilities or is promoting an evolution of the program. However, not every unit that uses Talon Thresher knows how to provide feedback or receive updates in the field. Despite reach-back concerns, it is positive for any directorate that amplifies training and education on data fusion capabilities or software solutions for future JADC2.

AF TENCAP has been providing applications of data fusion capabilities to the war fighter since 2016 when the development team launched its Talon Thresher program in USINDOPACOM.[70] Since that time, Thresher has acquired over 600 subscribers, including the development team, and employed throughout PACAF, AFCENT, and the 603rd AOC in Ramstein Air Base, Germany.[71] AF TENCAP is willing and able to provide training to any force that is wanting the capability and hosts forums for any war fighter to gain experience in data fusion or software solutions. AF TENCAP is not the only force supporter that can provide software solutions, but it has a reputable program that leverages designs and is working toward supporting the Advanced Battle Management System.[72] An experience similar to the 603rd AOC's use of Talon Thresher is the J2 intelligence elements have harnessed data fusion and data networks faster than the J3 ops divisions.[73] This approach is not wrong, but it limits tactical considerations and JADC2 capabilities if common architecture is not available to commanders in their main operations centers.

# Recommendations

Senior leaders are keen on developing JADC2 for Joint Warfighting.[74] JADC2 is a priority for the outgoing Chairman of the Joint Chiefs of Staff, Gen Mark Milley, and then– chief of staff of the Air Force General Goldfein echoes his priority as, "First and foremost, you have to connect the joint team . . . to have access to common data so that we can operate at speeds and bring all domain capabilities against an adversary."[75] JADC2 needs a software solution to connect and fuse data, which the National Command has at its disposal today. However, this cannot mature without education and training at the major command (MAJCOM) levels on where to go for solutions or individual duties closely tied to software intensive operations. Another view is that a centralized organization to collaborate among other agencies and support software development is key. Finally, the Air Force must invest software solutions and data fusion capabilities into wings, not only to defend the base but also to practice operating not integrated with technology, so Airmen are ready for future conflicts.

Now-retired General John E. Hyten took software solutions to new levels in the Joint Capabilities Integration and Development System (JCIDS).[76] Risks of failure, in the past, have driven decisions higher in the military structure, despite authorities writing to allow quick acquisition. He was aware that in the twenty-first century, capabilities are heavily dependent on software.[77] Data fusion was a small piece of General Hyten's concerns and highlights that getting solutions is not hard, but individuals and leadership need to know where to turn. The lack of data-solutions training and education exposed to the warfighter is a large part of why multidomain or multisensory integration has not become mainstream. This research revealed that the data-link and data-fusion community is very small and varies because of the complex structure in the AF's C2. AF TENCAP is one of many obscure offices that handles unique problems, but these offices do not need to be hidden from other agencies that need solutions to identified challenges. Information must be interoperable, which is one of the tenets of C2 in Joint Publications 3-0.[78] This is the first recommendation: all MAJCOMs' J5 (Strategy, Plans, and Policy), J8 (Force Structure, Resource, and Assessment), and J9 directorates should have a list of offices that can provide unique capabilities for current and future requirements. Instead of units hunting on their own, MAJCOM staffs

should link units to problem-solving offices the Air Force or joint agencies already have.

In addition, as information is becoming more widely distributed with higher demands, the two current JICO and future JDNO courses may show greater worth in combined training instead of separated. Cyberspace officers and air battle managers, predominately, attend the courses. With the limited number of JICOs and JDNOs produced, combined schools will amplify capabilities and synchronize effects. These courses, when combined, may also harness professional development and joint growth for operational-focused career fields.

The next recommendation is streamlining joint solutions by recognizing methods of information sharing, data fusion, and sanitization protocols as gateways to link knowledge among services, agencies, and partners. The JCIDS must link NRO and multiservice software solutions, such as AF TENCAP, to begin the process of discussing data fusion with all intelligence and information platforms. This will leverage the art of the possible and begin challenging classification concerns along with sanitization protocols to get the warfighter and the IC on the same AOC common picture. Declassification and policy regarding information sharing with agencies and partners is a separate discussion, but a discussion that will certainly come up and is needed. With the right amount of knowledge displayed, cuing options will increase the warfighter's resources available to reconcile ambiguity and speed up the kill chain. With data fusion and sanitization protocols, the ability to share among allies and partners in the same JAOC or CAOC will enhance a robust toolkit to compete against information competitors.

Finally, the last recommendation is that all Air Force wing operations centers or command posts must increase their relationships with their internal IC and leverage daily interactions regarding emerging technologies for wing commander awareness. The defense of bases is the first line of growth and development for C2 resources and familiarity. The Air Force must ensure how we train is how we fight, and wing commanders are an integral part of maintaining readiness. Defending bases and continuing current operations with available technology and innovative thinking will make interoperability with mission command seamless in future conflicts. Creating one Air Force common picture for each base to utilize and update will synergize how the Air Force fights in the future with all domains integrated. The IC shows it is leading the way and the operations directorate can

easily learn from and delegate awareness through harnessing what the IC is already using and managing for a decentralized C2.

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Chapter 12

# Leveraging Artificial Intelligence and Automatic Target Recognition to Accelerate Deliberate Targeting

*Gary Beckett*

## Introduction

Thomas Friedman's latest book, *Thank You for Being Late,* discusses Moore's Law, which states microprocessor chips double in power every two years,[1] and alarmingly, goes on to say that this growth rate surpasses our ability to adapt.[2] Or in other words, technology is advancing faster than we can understand and fully utilize it. As technology accelerates, so does the warfare it enables, potentially leaving the joint force scrambling to keep pace with competitors.

To persevere, Department of Defense (DOD) leadership must first acknowledge that future warfare will overwhelmingly be characterized by speed. The DOD must then shift modernization priorities toward emerging technologies which demonstrate the potential to offer decisive advantage on the battlefield. It should look first to the Air Force, which began this process by leading an effort to accelerate its decision cycle within the framework of Joint All-Domain Command and Control (JADC2). This effort is fundamental to America's ability to compete, deter, and win in the future against peer competitors who threaten US national security.

Contesting these efforts, however, are adversaries who have studied US warfare since our sweeping victory over Iraq in Desert Storm, and some of them are already demonstrating a technological advantage in key areas such as artificial intelligence (AI). Arguably, our greatest competitor is an ascendant China, which aggressively invests in AI, believing it should be the global leader in pursuit of this technology.[3] Additionally, China continues to threaten the security of US partners and allies in Asia through its actions in the South China Sea, fomenting an environment of regional instability.

Considering the actions and strategic narrative of the Chinese, it becomes evident that the pursuit of so-called "game-changing" technologies, such as AI and Automatic Target Recognition (ATR), is a

critical component of US national security; so much so that some pundits warn, absent aggressive action, the US risks losing its lead altogether in AI.[4] And if America loses the lead in these vital technologies, it may also lose the next conflict against a peer adversary. It is time to change the game.

## Case Study: Operation Inherent Resolve

### Research Methodology

This research employed case study methodology with a single case analysis of Operation Inherent Resolve (OIR). Process tracing was accomplished through interviews with personnel having firsthand knowledge of the deliberate targeting cycle in OIR. This methodology is derived from George and Bennett's *Case Studies and Theory Development in the Social Sciences.* Five officers in the ranks of lieutenant colonel to major general from the Air Force and Army were interviewed. The interviewees all had direct knowledge of the deliberate targeting cycle, to varying degrees, and were eyewitnesses to the process and its efficiency.

### Evidence

The preponderance of evidence collected in the interviews, combined with secondary source information, validates the thesis that the deliberate targeting cycle was unresponsive in OIR, with one officer even noting "[they] could not get CENTCOM approval of weaponeering for weeks."[5] In their book *Hunting the Caliphate*, Dana Pittard and Wes Bryant arrive at the same conclusion in noting the US Embassy strike cell had a "very restrictive and time-consuming process to gain airstrike approval."[6] Indeed, the inefficiency of the process required the strike cell to ultimately invent a novel process, dubbed "Planned Dynamic," which circumvented joint doctrine and resulted in strikes in as little as three hours.[7] Though all but one respondent agreed the doctrinal deliberate-targeting cycle was unresponsive, all respondents agreed several processes are favorable candidates for augmentation by AI and ATR. Synthesizing the interview data yielded three primary causal factors of inadequate intelligence capacity: insufficient intelligence, surveillance, and reconnaissance (ISR); asset availability; and redundant target vetting.

A primary contributor to these challenges is processing, exploiting, and disseminating (PED) intelligence data, which is a frequent limiting factor in joint targeting. For one, extensive personnel are required to PED the massive amount of intelligence which floods a joint operations center. Pittard and Bryant noted this challenge in discussing the difficulty of exploiting a steady flow of intelligence, which often resulted in inaccurate information during their tenure in Iraq.[8] Interview data further confirmed this challenge as all but one respondent identified intelligence operations as a limiting factor in the targeting cycle,[9] with one officer stating the intelligence apparatus could not keep up with the amount of data that streamed in.[10] Research by Benjamin Lambeth, in his draft text on OIR, further confirms this assessment when quoting Brent McGurk,[11] who stated that "the [primary] challenge was intelligence and target development."[12]

A second concern is intelligence data fusion, a challenge one officer identified as an element lacking in the targeting cycle.[13] Lambeth's research confirms this assessment by highlighting the vast amount of information that must be fused in the deliberate targeting process, including four to five feeds of overhead imagery, electronic communications intercepts, human intelligence, and hostile and friendly fire events.[14] Pittard and Bryant also recognized this issue, noting that the "level of focus required [to coordinate this amount of information] . . . would probably be mind-boggling to the outside observer."[15] The strain placed on a single intelligence analyst now exceeds their capacity to process it, which may result in single points of failure as humans are stretched to their cognitive limits.

Another element stretched to its limit was ISR asset availability. Pittard noted that there was a severe shortage of ISR assets available during his tenure in Iraq, which negatively impacted operations there.[16] To be sure, Pittard deployed before the case study interviewees, but he was challenged by an ISR shortage in Iraq in the same manner the interviewees were in Syria. In fact during the interviewees' phase of OIR, Syria was not the priority, which resulted in disproportionate allocation of ISR assets and negatively affected operations there much the same as Pittard experienced in Iraq. Because of this, respondents who participated in Syrian operations agreed that there were not enough joint ISR assets available.[17] This disproportionate allocation of ISR assets suggests there were indeed not enough of them available for Combined Joint Task Force (CJTF)-OIR.

In response to this specific issue, one respondent noted that the scarcity of ISR assets regularly required general officers to "sit at the table" to settle disagreements over allocation,[18] while another noted that as demand for remotely piloted aircraft (RPA) increased, Hellfire missiles had to be rationed.[19] This should never have happened as CJTF-OIR was responsible for operations in Iraq and Syria and should have been resourced sufficiently to execute operations in both theaters concurrently.

To address these challenges, the joint force should investigate AI and ATR systems, which may increase the capability and availability of these finite resources. One technology, advanced ATR sensing supported by AI, may mitigate deficiencies by identifying more targets than a human operator can, and faster. In turn, this could accelerate or potentially even abolish the current target vetting process, one of the primary factors that slowed deliberate targeting in OIR.

The vetting process in the early stages of OIR required that US Central Command (CENTCOM), which was nearly 7,000 miles from Baghdad, vet all targets, resulting in excessive strike approval delays.[20] Pittard observed this dynamic as early in his deployment he was "bombarded with anxious calls from [the] Embassy, State Department, Defense Department, [and] various intelligence agencies [who wanted] . . . updates and reassurances" before strike approval.[21]

Exacerbating this issue was the coalition dynamic of partner nation vetting requirements, which further delayed strike approval.[22] Pittard also noted that during his deployment, the coalition was "basically at war with itself," and the fight against Islamic State of Iraq and Syria (ISIS) was "one of the most frustrating experiences [he'd] yet had in the military."[23] In fact, one interview respondent stated that even two years after Pittard left, targets still passed through at least seven different entities during vetting.[24] Another respondent agreed vetting was a challenge and added that the process of intelligence review, weaponeering, and collateral damage estimation occurred multiple times by disparate entities.[25] Lambeth also cited the convoluted process, quoting then-Major General Lofgren: "each target required multiple days of coordination with interagency and the Iraqis to get approval."[26]

Interview data compiled during this research, when combined with Pittard and Bryant's experience and Lambeth's research, confirm the thesis of this chapter. Although there were additional factors not mentioned that degraded deliberate targeting, the underlying causal mechanism for this case was prohibitively slow operations in target

development, validation, nomination, and prioritization during the joint-targeting process. Certainly, there are factors beyond joint force commander control, such as political objectives and rules of engagement, but there are also several elements of deliberate targeting processes that can be accelerated by AI and ATR.

## Artificial Intelligence

Artificial intelligence is crucial to the United States maintaining a competitive advantage as the world increasingly becomes multipolar. This looming change will breed instability and, in turn, generate conflict as states seek advantage within the new dynamic. To ensure the US maintains its primacy in the impending shift, it must aggressively pursue AI. Leadership in this capability is vital as AI has demonstrated speed, flexibility, accuracy, persistence, reach, and coordinated mass when employed in the battlefield.[27] These characteristics are critical competencies for tomorrow's conflict. Indeed, AI is so vital that the Center for a New American Security calls for a $25 billion investment across the government, measures to stem the loss of American AI talent, and actions to prevent theft of critical AI by malign actors.[28] And on the list of malign actors in this field is China, which is competing fiercely by pursuing AI-enabled data fusion, information processing, and intelligence analysis.[29] Absent aggressive action by the US, it may lose the technology race in this field.

With the "why?" addressed, a consideration of the "what?" is necessary. Fundamentally, AI is defined as machines capable of modeling the intellect typically associated with human cognition.[30] Broadly speaking, there are two types of AI, artificial general intelligence (AGI) and Narrow AI. AGI seeks to make sense of the world and is able to match, or in some cases outperform, human ability to do so.[31] As promising as this sounds, the scientific community believes AGI is currently an unresolved technical challenge which will remain so for several years.[32] However, Narrow AI operates ubiquitously now, possessing the ability to execute diverse tasks, such as recognizing objects and people,[33] and should be considered for augmentation of deliberate targeting, JADC2, and other battlefield applications.

One application of Narrow AI for deliberate targeting is autonomy, defined as the ability of machines to execute tasks without human input.[34] An everyday example of this is a robot vacuum cleaner. This

autonomous system and others like it execute preprogrammed tasks, interacting with the environment through sensors and actuators.[35] These machines follow a basic rudiment of sense, decide, and act,[36] using software to compare observed patterns to reference ones programmed in memory.[37]

Although sense, decide, and act provide a reliable foundation, Narrow AI vastly increases in capability when coupled with machine learning, which programs robots to learn *and then* teaches them.[38] The training information may be general in nature or specific to a particular field. IBM's Watson is an example application of both general and specific machine learning. After Watson amazed audiences on *Jeopardy!* with its learned general knowledge, it later diagnosed medical conditions using specific information and further recommended treatment plans after digesting massive amounts of medical data.[39]

Besides absorbing information, machine learning algorithms can also classify data and find correlations to make statistical predictions about future behavior.[40] In fact, Canadian research demonstrated machine learning correctly classified secret documents reliably to 90 percent,[41] while AFWERX expects AI to improve Airborne Warning and Control System availability by 25 percent through predictive maintenance. Machine learning can further identify anomalies in data[42] as seen with London's Cromatica camera software, which predicted suicides through detecting abnormalities in observable patterns of life.[43]

AI makes yet another substantial advance when combined with deep learning technology. This type of machine learning enables systems to improve their analytical capability through data *and* experience.[44] Studies found deep learning is well suited for processing tremendous amounts of data[45] since the machine begins with simple concepts and builds to increasingly complex ones through experience.[46] One of these concepts is predictive analysis, exhibited by AlphaGo, a machine famed for defeating champion Lee Sedol in the game of *Go* in 2016.[47] The game is a computationally massive strategy problem and AlphaGo's victory demonstrated the utility of deep learning in processing, experience, and prediction. This capability shows promise for mitigating the challenges of intelligence analysis, where the amount of data now exceeds human capacity to process it.[48]

But simply processing information is not enough, as making sense of it is crucial to decision-making. This is another area where AI excels as it also possesses the capability to fuse data more effectively than

humans. Zhao et al. noted the success of AI in data fusion and decision-making augmentation in their research.[49] This key finding may alleviate the burden on the human element in the PED process. Retired Gen Stanley McChrystal also cited this challenge in *Team of Teams,* alluding to a "four-foot-high mound" of intelligence data stacked and unexamined in a supply closet in Baghdad during Operation Enduring Freedom.[50] Furthermore, a Congressional Research Service report on AI touted the critical importance of AI in the overall ISR mission (which requires significant data analysis and fusion).[51] The report also highlighted the applicability of AI to multi-domain command and control (a mission supported by ISR) through data fusion.[52]

One data processing effort, code-named Project Maven, seeks to resolve some of these PED challenges by leveraging AI and machine learning to differentiate people from objects in unmanned aerial vehicle (UAV) video footage, a task historically reserved for humans. The project also seeks to overcome the problem of infoglut, which is inherent in intelligence analysis and frequently overwhelms the intelligence analyst.[53] Bolstering Project Maven's research, the Stockholm International Peace Research Institute (SIPRI) asserts that machine learning is well-suited to ISR management, decision support systems,[54] and prediction.[55] Certainly, one does not need the assistance of a machine to recognize the potential of AI to accelerate deliberate targeting and ultimately, JADC2.

## Automatic Target Recognition

ATR software was first invented in the 1970s and has recognized objects through pattern analysis since its inception.[56] At its core, ATR is the automatic or unaided capability of machines to process sensor data to locate and classify targets.[57] A subset of ATR, Aided Target Recognition (AiTR) is a type of ATR which emphasizes human-in-the-loop operations, seeking to reduce the workload on the human operator.[58] While both of these technologies demonstrate promise in aiding deliberate targeting, current policy dictates the DOD not pursue human out-of-the-loop employment. For this reason, the DOD should continue to test and experiment with deployment of AiTR while concurrently researching in-the-loop and out-of-the-loop ATR employment.[59]

The intent behind ATR employment is to detect and identify targets through data, which are typically (although not exclusively) presented as imagery.[60] These images include sensor data from (not exhaustive) forward-looking infrared, synthetic aperture radar (SAR), TV camera, laser radar, and nonimaging sensors.[61] ATR systems can recognize shape, height, velocity, radio frequency, and acoustic signature[62] as well as other characteristics in potential targets.[63] ATR also identifies soft, human targets,[64] multiple and group targets, specific events, light flashes, muzzle blasts, environment changes, disturbed earth, and more.[65] The latest ATR even differentiates between people walking and running.[66] In addition to identification, ATR technology performs image fusion, target tracking, and persistent surveillance.[67]

To be sure, ATR has been used by the military for decades in various applications. A 2017 SIPRI report cited 154 military-fielded ATR systems, of which 50 were decision aids, 24 were command and control, and 56 collected and processed information.[68] Many of these ATR systems are found in weaponry, such as the Royal Air Force's Brimstone missile, which is capable of identifying, tracking, and striking vehicles autonomously.[69] Other advanced ATR weapon systems that can detect, identify, track, select, and attack targets include the Dutch Goal Keeper, multi-national Phalanx, and Israeli Iron Dome.[70] Even though the DOD is already employing some of these technologies, it must accelerate the adoption of the newest capabilities into its weapon systems, especially since these advanced systems can find and discriminate specific targets, which would have decisive impact during future deliberate targeting, but only if the DOD increasingly incorporates them into sensing and strike platforms.[71]

Strengthening the case for ATR are recent developments, which include target detection in multispectral and hyperspectral imaging detection (images are generated by recording electromagnetic radiation). One company, Applied Research, LLC, recognized that these systems are particularly well suited to detecting targets from aircraft and spacecraft.[72] Accordingly, they patented a system which vastly reduced the time required to classify multispectral and hyperspectral images and promised real-time target detection,[73] a capability which could be used to accelerate deliberate targeting in future conflict.

Another technology with ATR applicability to future conflict is SAR mapping. This technology continues to evolve and is widely employed by joint force operators in various weapon systems. Currently, SAR mapping requires the highly trained skill of operators interpreting

information. To be sure, these warfighters identify targets in seconds now, but that pace will be too slow for next-generation warfare, where machines will identify targets in milliseconds. Therefore, the joint force should investigate emerging technologies in SAR and their ability to combine with ATR for accelerating deliberate targeting.

One of these technological combinations is SAR ATR, using computers to progress through the three stages of detection, discrimination, and classification of data.[74] Although humans have performed these stages for decades, the sequence timing was accelerated by Hidetoshi Furukawa in 2018, using a proposed Convolutional Neural Network.[75] This neural network, dubbed "Verification Support Network," exhibited 99.55 percent accuracy in classification of a 2,420-image dataset.[76] Furukawa's research demonstrated ATR is well suited to the challenge of target detection and identification, yet another reason it should be considered for augmenting deliberate targeting and JADC2.

The success of these systems shows much promise for accelerating deliberate targeting. The DOD should expand its research and development of these key technologies as well as develop tactics, techniques, and procedures to incorporate them into JADC2. Systems which can detect and identify targets instantaneously, transmit encrypted data, and then fuse it are vital to maintaining advantage in future conflict.

## Air Force Futures

This research advocates the DOD invest in AI and ATR. At the time of this writing, no specific organization is designated lead agency. The Air Force has a Futures Directorate, which is well suited to this task. Air Force Futures (AFF) should take the lead on many recommendations cited in this research and further develop these technologies for implementation across the DOD.

AFF was created by Secretary Wilson and General Goldfein to examine the Air Force's "diverse warfighting portfolio and drive enterprise-wide solutions to complex issues . . . [and] to help the Air Force rapidly identify key capability investments to build the foundation for the future force."[77] AFF's mission is to "drive enterprise-wide integration and future force design . . . [and] develop total force, multi-domain operating concepts."[78] According to General Goldfein,

this organization is the "lead for integrating and designing a blue-print of a future Air Force."[79]

The stated mission and vision of AFF make the organization an ideal fit for leading the joint force in the pursuit of these game-changing technologies. In fact, AFF already has established JADC2 and AI cross-functional teams (CFT).[80] These teams should lead the DOD into next-generation warfare by accelerating deliberate targeting with AI and ATR. To that end, some specific recommendations for AFF are offered below.

# Recommendations

The Air Force should prioritize research, development, testing, policy and doctrine, funding, and implementation of AI and ATR for deliberate targeting and ultimately, JADC2.

## Research

- The Air Force should prioritize staffing AFF with graduating Senior Developmental Education and Intermediate Developmental Education students. AFF should also increase Active Guard Reserve and Military Personnel Appropriations tours for Air Force Reserve and Air National Guard Airmen to bolster capacity and leverage the distinct technical civilian skillsets of the Total Force in the areas of AI, ATR, and machine learning.[81]

- AFF should partner with major defense laboratories including, but not limited to, the Air Force Research Laboratory, Sandia National Laboratories, Los Alamos National Laboratory, Defense Innovation Unit, Kessel Run, Defense Advanced Research Projects Agency, and any emerging DOD software laboratories to evaluate which AI and ATR technologies are best suited for testing and development.[82]

- AFF should partner with industry to determine which AI and ATR technologies are best suited to the Air Force's needs and acquire technologies which exceed the capability of those developed by DOD's national laboratories.

- AFF should partner with academic institutions and leverage the AI CFT to determine which AI and ATR technologies are best suited to the Air Force's needs.

- AFF should designate a cell responsible for coordination with each partner in defense, industry, and academia.

**Development**

- The JADC2 CFT, AI CFT, and Army Futures and Concepts should collectively devise an implementation plan for AI and ATR augmentation of deliberate targeting and JADC2.
- AFF should foster a shared vision for JADC2 with the other services. Each service's futures element should be a key partner in the development of AI and ATR. AFF should designate liaison billets for sister services.

**Testing**

- AI and ATR should be tested at the Shadow Operations Center, using a risk-driven concept of operations (CONOPS). During low-risk operations, humans should operate in-the-loop. Medium-risk operations should transition to human-on-the-loop and high-risk operations progress to human-out-of-the-loop. Although there is currently no inclination for lethal fires without human approval, testing the capability should occur in the event future warfare requires it. These tests should also focus on building trust in AI and ATR systems. The JADC2 CFT should lead this effort.
- ATR systems should train on available friendly and adversary target datasets across the joint force. ATR should be tested through employment on RPA and UAV platforms in exercises, such as Red Flag or Weapons School integration phase.

**Policy and Doctrine**

- Air Force Doctrine Document Annex 3-30, JPUB 3-30, JPUB 3-60, and all air operations center associated Tactics, Techniques, and Procedures manuals should reflect AI /ATR best practices, upon full operational capability (FOC) of these systems.
- The Air Force should modify current or pioneer new doctrine which specifically addresses JADC2 of nonconventional paramilitary proxy forces.[83]

- The Air Force should adopt Planned Dynamic as a third type of targeting and document the process in JPUB 3-60 once it is proven viable.

### Funding

- AFF should champion AI and ATR in the Program Objective Memorandum.
- AFF should champion AI and ATR for the joint force and collaborate with sister service elements, ensuring a unified voice in programming them into the president's budget.

### Implementation

- These capabilities are urgently needed in *high-end* conflict. Once initial operational capability is achieved, AI and ATR should be fielded in United States Indo-Pacific Command as a test bed for further refinement using a human-in-the-loop CONOPS to establish FOC.

## Conclusion

The current deliberate targeting cycle lags the pace of modern warfare. It operates at the speed of the doctrinal battle rhythm and will fail to execute inside the adversary's decision cycle in high-end conflict. The joint force must accelerate deliberate targeting and, by proxy, its own decision cycle, through investment in artificial intelligence and ATR. These technologies should be researched, developed, tested, and implemented through a strong partnership across the joint force and with our defense national laboratories, industry, and academia. AFF, through its JADC2 and AI CFTs, should lead the joint force in developing, resourcing, and implementing AI and ATR in deliberate targeting and JADC2.

The Airpower Research Task Force was tasked to derive "quick wins" from Operation Inherent Resolve. One quick win is to validate the AI and ATR targeting capability claims in this research through training exercises, such as Red Flag or USAF Weapons School integration phase. If AI and ATR prove capable of accelerating deliberate targeting as suggested, then these capabilities should compete

formally for resources in the Planning, Programming, Budgeting, and Execution cycle. Upon increased trust, they must later be considered for wider application in JADC2. This quick win will take the initial steps toward leveraging AI and ATR to accelerate deliberate targeting.

## Appendix A—Case Study Interview Questions

- What was your job and title during OIR, and how does it relate to the joint targeting cycle (JTC)?
- Overall, how effective was the JTC in achieving strategic objectives of campaign?
  - ° How efficient was it?
- To the best of your knowledge how well was Phase 1 of the JTC executed?
  - ° Phase 2, 3, 4, 5, 6?
  - ° Any steps that weren't executed according to doctrinal recommendations?
- Where were the bottlenecks in the JTC?
- *Specifically,* was the deliberate targeting process slower than doctrinal recommendations?
  - ° If so, what do you think caused the developmental team (DT) process to be slow?
- Was the DT process executed according to doctrinal recommendations?
- About how long did it take to get targets approved?
  - ° What contributed to or caused that timing?
- How well did the PED process flow? Was it timely?
  - ° Why or why not?
  - ° What do you think could be done to improve the PED process?
- Is there anything you think that could be automated in the JTC?
- Is there any role that you think AI could play in the JTC?
- Is there any role that you think ATR could play in the JTC?
- Any additional recommendations for chief of staff of the Air Force for the JTC, based on your experience?

# Notes

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3.  Gregory C. Allen, *Understanding China's AI Strategy: Clues to Chinese Strategic Thinking on Artificial Intelligence and National Security* (Washington, DC: Center for a New American Security, 2019), 4–5.

4.  Martijn Rasser et al., *The American AI Century: A Blueprint for Action* (Washington, DC: Center for a New American Security, 2019), 7.

5.  Maj Gen Andrew A. Croft (Deputy Commanding General–Air, Combined Joint Forces Land Component Command—Operation Inherent Resolve and Deputy Director, Joint Air Component Coordination Element, Combined Joint Task Force—Operation Inherent Resolve), interview by the author, 19 December 2019.

6.  Dana J.H. Pittard and Wes J. Bryant, *Hunting the Caliphate: America's War on ISIS and the Dawn of the Strike Cell* (New York: Post Hill Press, 2019), 145.

7.  Croft interview.

8.  Pittard and Bryant, *Hunting the Caliphate*, 189.

9.  The dissenting opinion resided with an officer who supported the Battle of Mosul, the coalition's primary focus during his tenure.

10.  Maj Gen Chad P. Franks (Deputy Commander for Operations and Intelligence, Combined Joint Task Force—Operation Inherent Resolve and Commander, Ninth Air Expeditionary Task Force–Levant), interview by the author, 20 November 2019.

11.  Presidential envoy for the global coalition against ISIS.

12.  Benjamin S. Lambeth, "America's Air War on ISIS: A Diagnostic Assessment," working draft, 15 July 2019, 181.

13.  Croft interview.

14.  Lambeth, "Air War on ISIS," 82–86.

15.  Pittard and Bryant, *Hunting the Caliphate*, 172.

16.  Pittard and Bryant, *Hunting the Caliphate*, 112.

17.  Those who participated in Iraqi operations did not cite ISR asset availability as an issue, as during their tenure, the Battle of Mosul was underway and was designated as the priority, if not explicitly by order, then implicitly through resource allocation.

18.  Lt Col Matthew J. Gomlak (Special Operations Joint Task Force–Operation Inherent Resolve J3), interview by the author, 8 January 2020.

19.  Franks interview.

20.  Col Shanon J. Mosakowski (Fire Support Coordinator and Chief of Lethal Fires, Combined Joint Task Force–Operation Inherent Resolve), interview by the author, 8 January 2020.

21.  Pittard and Bryant, *Hunting the Caliphate*, 114.

22.  Mosakowski interview.

23.  Pittard and Bryant, *Hunting the Caliphate*, 97.

24.  Mosakowski interview.

25.  Col Thomas R. Bolen (Division Fire Support Coordination and Commander, First Infantry Division, Combined Joint Task Force–Operation Inherent Resolve), interview by the author, 9 January 2020.

26.  Lambeth, "Air War on ISIS," 181.

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48. Kania, 27.

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81. Although outside the scope of this research, there exists a corresponding human capital element of talent management to this challenge which may require attention.

82. Although outside the scope of this research, there exists a corresponding resourcing element to this challenge which may also require attention.

83. This is a secondary recommendation derived from research interviews. Although this recommendation did not fit the narrative of this body of research, it remains relevant in the author's opinion.

# Innovating Informational Solutions during Superiority

*R. Anthony Vincent*

## Introduction

**Primer**

The Islamic State of Iraq and Syria (ISIS) is a recent example of a threat network that first incubated virtually with limited personnel to build financing and manpower before physically forming en masse. Once coalesced with personnel and equipment, ISIS rapidly gained control of territory within Iraq and Syria before facing significant military opposition. Operation Inherent Resolve (OIR) was the US-led effort to deny ISIS territorial holdings in the physical realm of Iraq and Syria. Within this narrow objective, OIR was a resounding success.[1] Eventually, coalition forces drove the ability of ISIS to hold territory to near zero. However, ISIS as a network continues spreading propaganda, recruiting, and banking funds. Measuring the health of a network is inherently complex, because of the multitude of interconnections among nodes and the exponential possibilities of routing information through these connections. As highlighted at the outset of Operation Enduring Freedom against Al Qaeda and reemphasized a decade later, "it takes networks to fight networks."[2] Applying this concept to air operations, one cannot expect airpower to fight a network-based adversary unless in conjunction with the totality of the US's own networks.

Just as modern conventional militaries are critically dependent upon their industrial complexes to build and sustain military equipment, threat networks thrive on information built from blocks of data. According to joint doctrine, "the groundwork for successful countering threat networks activities starts with information and intelligence to develop an understanding of the operational environment and the threat network."[3] The US will win future wars by exploiting information for the networked organization both better and faster than the adversary. Therefore, the minimum threshold for adapting to informational change is the operationally relevant timeline, set by

the faster of the adversaries. Whoever exploits data the fastest to produce the most actionable information owns the pace of operations. Therefore, air operation centers must network and situate themselves to solve informational problems better and faster than their adversary so that they may optimally apply airpower tailored to the current conflict.

### Thesis

In times of exponential change, adequacy in today's fight rapidly becomes inadequate in future competition. The OIR case of modernizing tanker planning for daily aerial refueling is one example among a class of informational problems where the combined air operations center (CAOC) overcame numerous institutional barriers to innovative problem solving. These barriers were not malign but were developed over the course of decades while sustaining military superiority to streamline the efficient acquisition of physical hardware. The lens of Six Sigma root cause analysis applied to the tanker planning problem suggests that institutional barriers inhibited a competent team with the right skills and defined responsibility from updating a process that was relatively easy to improve and modernize. Such barriers impede innovative updates to processes that exploit operationally relevant data for improved decision-making. This analysis recommends several ways for the Air Force (AF) and the CAOC to maintain the leading edge on solving informational problems.

### Outline

The chapter is organized by first reviewing the tanker planning case study from OIR in detail where analytical systems were available to solve operational problems but were unable to in a timely manner because of systematic limitations. Several other CAOC processes were updated during OIR, but the tanker planning example is well documented and contains most of the elements that are generic to the wider class of improving informational exploitation using modern technology. Next, this scenario is analyzed from a Lean Six Sigma perspective to identify potential root causes that inhibited faster resolution. Then the root cause analysis leads to and supports the four recommendations presented for CAOC operations beyond OIR and when considering military scenarios affecting multiple geographic

combatant commands (CCMD) at once. Finally, the conclusion briefly summarizes the key takeaways of this study.

## Background Case Study: Whiteboards, Tankers, and Jigsaw

In April 2016, the secretary of defense initiated the Defense Innovation Board (DIB) to address the realization that adaptability is crucial to success in future peer conflicts. Whereas current defense systems are designed to optimize output of existing capabilities, the charter of the DIB is to provide "independent advice and recommendations on innovative means to address future challenges."[4] The DIB is an independent federal advisory committee comprising leaders from the private sector identified as experts in either managing complex organizations, identifying and transitioning innovative technologies into operations, or developing new technology concepts. Secretary Carter appointed the executive chairman of Alphabet Inc., Eric Schmidt, to chair the DIB and promptly sent the DIB on a fact-finding tour of military installations. By October 2016, the DIB toured the CAOC in Al Udeid Air Base in Qatar during the height of OIR operations against ISIS territorial holdings.[5] What they saw was underwhelming to the leading innovators of the US private sector; service members operating information systems last updated two decades ago in the 1990s and intricate plans to provide aerial refueling with tankers mapped out on whiteboards with colored magnets and markers. One eraser swipe could ruin eight hours of planning and a day's worth of airborne operations.

The tanker planning process with whiteboard dependency quickly became the poster child for the systemic problems inhibiting innovation within the CAOC. There were numerous other examples of informational procedures within the CAOC that were outdated, in need of modern innovations, and later addressed. However, the contrast between whiteboarding with magnets and modern cloud-based portable technology stands out as particularly stark. To Eric Schmidt and the DIB, whose continued business success is directly dependent upon innovative ideas, this may seem counterproductive to tolerate a methodology so clearly out of date. To be fair to the multiple staffers of the CAOC over the years, the whiteboard tanker process worked. Tankers routinely rendezvoused with other aircraft in the United

States Central Command (CENTCOM) area and successfully provided aerial refueling. While the tanker process technically worked, lasting incremental improvements and innovations had ground to a halt over the past 20 years of CENTCOM air supremacy.

The program office responsible for upgrading the CAOC treated it as a complete weapon system, comparable to the F-22, where all inefficiencies were to be solved in one monolithic package to prevent unnecessary redundancy and repetition. Such a method, specified by the Federal Acquisition Regulation (FAR), is an efficient way of delivering a complicated technical system with well-defined requirements and a stationary threat environment.[6] Since the adversary's development of the improvised explosive device, the operational threat environment is changing faster than the institutional acquisition systems can produce deliverables. Against this backdrop, Lockheed Martin received an initial contract in 2006 worth $538 million to upgrade all 20 air operations centers (AOC) around the world from system "AOC 10.1" to an updated "AOC 10.2." However, when the Air Force solicited bids in 2013 to perform the majority of the work, Lockheed Martin declined to submit and walked away from the program.[7] The $374 million initial award went to Northrup Grumman, but after only three years of work, Congress refused to add funding to the program in 2016 as cost overruns increased by a factor of two at $745 million.[8] Furthermore, the program reported Northrup's progress as three years behind schedule after only three years of performance, meaning that Northrup made zero progress developing AOC 10.2. Those tasked with operating the CAOC made the best of their situation without organic personnel to tackle informational development, limited funding to outsource specific problems, and no mandate to drive efficiency as that responsibility was located externally at the program office.

Separate from the large contract attempts to modernize operation centers, the CAOC has partnered with a team from the Naval Postgraduate School, since about 2005, to write a software package replacing the analog process of magnets on whiteboards.[9] Few details are available on this effort, but what is known is that a software product was delivered to the CAOC that used computer resources to optimize tanker sorties and refueling routes. However, the partnership did not include a maintenance and software sustainment plan for the planning tool. Therefore, the software tool stopped functioning and became outdated with the next set of operating system upgrades within the CAOC. Shortly thereafter, the CAOC staffers were back to

using pucks and whiteboards to plan tanker routes. Aerial refueling operations continued regardless, so the CAOC resorted back to a proven process, even if labor intensive and suboptimal.

Along with the DIB, Secretary Carter initiated another group within the Department of Defense (DOD), called the Defense Innovation Unit Experimental (DIUx), tasked to transfer the best technology and innovative practices from the private sector to the DOD.[10] The Director of DIUx, Raj Shah, accompanied the DIB during their visit to the CAOC at Al Udeid and concluded that DIUx was positioned to quickly solve this problem of antiquated tanker planning. DIUx then received concurrence from the US Air Forces Central (AFCENT) Commander and tasked one of their teams, led by Lt Col Enrique Oti, already working with a tech company called Pivotal Inc. in Silicon, to deliver a rapid solution. Lieutenant Colonel Oti first built a military team of six by mass soliciting active duty Air Force members with experience writing computer code, regardless of rank.[11] This small group of coding-capable airmen assembled at the CAOC and worked directly with the tanker planning team. Using Pivotal Inc. as their expert reachback in software development and iterating with the CAOC, Oti and the DIUx team delivered an updated planning tool in four months for an estimated $1.5 million. The software tool increased tanker route efficiency, saved approximately $750,000 to $1 million per week, and paid for itself in two weeks.[12]

The tribulations and subsequent success of the Jigsaw story caught the attention of senior leaders, including the secretary of defense and secretary of the Air Force. With support from the top levels of the DOD, the team assembled by Lieutenant Colonel Oti repositioned to Boston, grew in size, and refocused into an "agile" software production center now called Kessel Run.[13] This group later delivered several more software tools to the CAOC for operational use, focused primarily on streamlining planning processes. Currently, Kessel Run represents a broader scope than technical problem solving within the CAOC and presents an alternative paradigm for how the Air Force could use developmental operations for rapid and iterative delivery of software instead of conventional acquisitions. However, not all information-based technical problems require production-quality, operational software, even if they are 80 percent solutions delivered in a timely manner. Kessel Run expanded its purview and currently appears to be becoming the agile software production center for the Air Force. The focused technical problem-solving cell DIUx deployed

to the CAOC returned stateside and evolved into something bigger in both size and scope.

The story of Jigsaw breaks down into generalized steps found in any number of information-based operational problems as follows:

- Deployed service members established a planning or operational method that worked sufficiently for the mission at the time of creation.

- The method slowly becomes outdated as technology progresses.

- Attempts to modernize the process fail numerous times because the attempted solution is unduly ambitious and ill-defined for the classical acquisition construct.

- Successful modernization attempts are short-lived because the effort lacks a defined sustainment plan to continually update the *delivered* product to work in concert with other technology upgrades, for example, operating systems and firmware changing yearly.

- Operators accept the status quo knowing the method is outdated. Because it works, they maintain operational superiority for the immediate phase, and those working in the operations center are not specifically tasked to improve it. A cycle reverts to the first bullet item and repeats until broken.

- A group, whether internal or external, provides constructive feedback and spurs action by pointing out the antiquity of the method while garnering senior leader support. External feedback may be crucial for breaking through barriers entrenched in bureaucratic procedures.

- A leader assumes responsibility and risk for fixing the problem and designates a dedicated and specific team with the right skill set for the task.

- The team focuses on the problem, works directly with the operational customer, navigates bureaucratic hinderances, and delivers a product significantly better than what existed before.

- Refinement and sustainment of the product continues. The development team revisits the product periodically to assess its effectiveness and suitability as a solution to the evolving operational problem.

## Root Cause Analysis and the Drive to Innovate

The case of the suboptimal tanker planning process is an excellent example of the barriers to innovation when an organization maintains superiority over its functional domain. Generally, there are two main drivers of innovation within an organization. First, defeat in competition forces the loser to either innovate or accept their lower status. Second, the desire to become more efficient and effective overcomes resistance barriers to innovation and the organization reaps the resulting rewards, which may be extrinsic, intrinsic, or a combination of the two.[14] In the case of air operations during OIR, coalition airpower maintained not only air superiority but also held air supremacy against ISIS. The combined air components operated with impunity when and how they desired over Iraq and Syria, regarding ISIS. With such a power advantage comes a reluctance to assume the risk of failure when pursuing innovation. Not all attempts to improve efficiency are successful. Consider, as a recent example, the 2020 Democratic Caucus in Iowa where a plan to streamline voting summaries using a smartphone application failed spectacularly under public scrutiny. Therefore, this section attempts to dissect the barriers of accepting innovation risks by the CAOC during OIR as shown in the longevity of the suboptimal tanker planning process leading up to the solution provided in 2017.

### What Is Root Cause Analysis?

Root cause analysis is a concept within the Six Sigma lexicon for improving industrial processes that focuses on a stated problem and performs a holistic review of possible root issues that caused the problem.[15] Such analysis is not definitive but often proves helpful in identifying which set of hypothesized causes enabled the resulting problem. The analysis starts by first defining the problem, preferably in the form of a why question.[16] In the case of tanker planning during OIR, the problem is written as follows: Why was it so difficult to update the whiteboard-based tanker-planning method by leveraging current technology? For an organization as intricate as the United States Air Force (USAF), there is not just one answer to this question but a multitude of roots with varying importance and causation. Of course, the AF community already knows that the software proto-

typing team from DIUx solved the problem and delivered a modern technical tool that improved the process.

The interesting results from root cause analysis are seldom the direct solutions themselves but rather the second- and third-order relationships compounding the difficulty of the solution delivery. Therefore, the aim is to identify the other major institutional problems solved on the path to delivering the tool. To help partition potential problems by topic, causation groups are written down in a structure known as an Ishikawa, or fishbone, diagram shown in figure 13.1. These groups are generally annotated as people, process, equipment, materials, procedure/method, and environment.[17] Some ideas may arguably fit into more than one category as described.

- People refers to anyone who enacts, enables, or interacts with a process.

- Process refers to the direct process where inputs are before outputs.

- Equipment includes the technology or machines required to handle the work.

- Materials are the inputs into the process. For example, jet fuel is a material necessary for physical flight, while accurate weather data is also a material necessary for safe flight operations.

- Procedure or Method refers to the way things are done; either explicitly written down as in law, doctrine, or manuals, or implicit institutional norms reflective of the "culture."

- Environment is the immediate area that surrounds the process.

One benefit of binning potential root causes into groupings is the potential of identifying a solution that solves (or collapses) a whole group of the fishbone. The next step in the root cause analysis would be to drill deeper into each individual item listed in figure 13.1 by asking further "why" questions until common roots become apparent. These "why" questions may go five levels deep or simply stop at the first level. For the sake of brevity for this study, cause and effect analysis stops with the first level in figure 13.1 as it is sufficient to support the conclusions presented in this chapter.
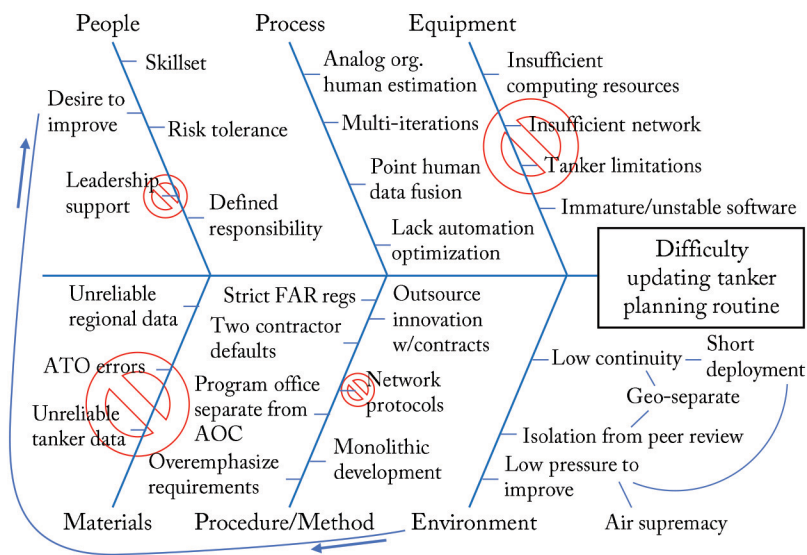
**Figure 13.1. A proposed Ishikawa (fishbone) diagram of the state of the tanker planning process before the DIB visit to the CAOC that spurred the rapid programming team from DIUx to create a software-based improvement**

## Ruling Out Roots with Negligible Causation

Not all items brainstormed on a fishbone diagram are necessarily causes leading to the specific problem statement. First, identifying which items clearly do not apply helps to draw focus on the topics with causation. In the case of tanker planning during OIR, the branches of the fishbone in figure 13.1 with negligible impact upon the problem are crossed out for visual reference. Notice that the entire branches of equipment and materials are crossed out. Equipment, in this case, represents the information technology (IT) required to carry out the planning process, including computers, an IT network, supporting software not specific to the planning process, and potentially the actual tankers with supporting equipment themselves. One unique characteristic of this problem is that none of these equipment components appear to have been a limiting issue. There were plenty of computers available running modern operating systems, a functional network, and a robust operational system for the airframes themselves. No new physical equipment was required to improve

tanker planning. The delivered solution was entirely software based, loaded onto the existing hardware system.

Similarly, since the output of the tanker planning process was the operational plan itself, the input materials of the process were primarily data, such as, but not limited to, air tasking orders, prerequisite campaign plans, weather forecasts, regional intelligence, tanker status and supply data, and other input data and their derived information. Note that this analysis only considers data affecting the ability to plan effective tanker routes, not data and information affecting operational success in the broader sense of advancing strategic goals. This input path is so critical to successful air operations that any errors within would show immediately in flights the next day. Operational failures from informational sources are intolerable during combat and are normally followed with intense pressure to rectify the problem. Therefore, this work assumes that problems within the material branch of the fishbone diagram are data and informational based and negligible given the success rate of pairing tankers to operational airframes daily.

Furthermore, it is important to point out that this analysis rules out both network protocols and leadership support as root cause problems for specific reasons. First, the CAOC in CENTCOM operates an IT network within its own microcosm. The combined forces air component commander (CFACC) has approval authority over the network the CAOC operates within so that changes to network protocols and software additions to operational systems are locally authorized.[18] Of course, developed software must adhere to DOD standards for information assurance and security testing. The CFACC does not have authority to circumvent DOD mandated best practices. However, within DOD guidelines, no external coordination or approval is required aside from concurrence of the CFACC. Additional approving authority may be delegated by the CFACC to lower levels if desired. Second, the cited articles and discussions with previous CAOC members make it clear that CAOC and CENTCOM leadership supported improvements and increased efficiency in the overall operational planning process. In fact, CAOC leadership guided the DIB during their visit to view the whiteboard system for tanker planning. However, leadership faced the same problems as everyone else in the CAOC. They were told that AF acquisitions was solving these problems through defense industry contracts and to wait for delivery of AOC 10.2. Paired with relatively short deployment cycles and low

continuity, CAOC leaders were rotated out of CENTCOM before they could internalize the fact that AOC 10.2 as a holistic system was trapped in development.

### Analysis and Discussion

Planning is a process, thus the items listed under the process group are the direct first-order problems that were addressed by the Jigsaw application. As mentioned earlier, the tanker planning process was heavily dependent upon human engagement, calculation with multiple iterations, and manual data entry. Impressively, the planners within the CAOC mastered this process and ran through it every day with minor and infrequent errors. However, computers are more accurate and exceedingly faster than humans at these repetitive optimization tasks. In just a few months, the DIUx team solved this branch of problems with their software application. The subtler and more pervasive root problems preventing the AF from addressing the process branch are found in the people, procedure, and environment branches.

There are three characteristics of the environment surrounding the CAOC during OIR that were factors inhibiting innovative improvements: the CAOC is geographically isolated from the US populace; deployments tend to be short and last between four months to one year; and the US and coalition partners maintained air supremacy over ISIS throughout OIR. These characteristics create a situation where those working in the CAOC may find it difficult to sustain a motivational drive to innovate. First, the convergence of air supremacy and a short countdown calendar before returning home nurture complacency and reluctance to challenge the status quo. The AF member may get trapped in the tempting rationale that the status quo is good enough to win and that their problems will shortly become someone else's problems. In other words, the operators felt little pressure to challenge the existing process and improve. Next, isolation from one's peers, whether DOD or private sector, further enables feelings of apathy. When an employee identifies an area that could be improved, they may need a sounding board and a little confirmation and encouragement from a peer outside the organization to tip the scale toward action. Isolation from external peer feedback creates a situation where the innovative member may be reticent to discuss their thoughts with an internal peer, because their idea may increase

the workload of their internal peer or even make such work redundant. Therefore, these potential problems due to environment are sources of friction that feed into the *desire to improve* an item under the people branch of figure 13.1.

The visit and feedback from the DIB performed at least two crucial functions. They spurred consensus across multiple levels of leadership to increase both the desire to improve and tolerance for risk. Recall that the tanker planning process was just one example of numerous CAOC processes already identified as outdated by the AF community. However, existing acquisition procedures failed to provide viable improvements to the CAOC. When the DIB independently assessed that tanker planning on whiteboards was clearly outdated and a relatively easy fix, they did not add any new perspective on the problem but constructively reinforced to AF leadership the areas for improvement self-identified by the CAOC. The DIB juxtaposed the fact that the AF tolerated several analog and arcane processes amid a technology explosion, including ubiquitous smartphones and cloud-based computing. This independent review created its own pressure separate from the environment and directly increased the desire to improve from the CAOC leadership to the secretary of the Air Force. Second, the will to innovate must compete with the reluctance to accept risk. When trying something fundamentally new, not all risk can be reduced, transferred, or avoided. Moving tanker planning to an automated, software-based process meant accepting a level of risk. The DIB visit created a situation where AF and CAOC leadership simultaneously accepted risk while confirming their desire to improve.

Next, those working within the CAOC could not create a software-based solution on their own, because they had neither the requisite skillset nor the defined responsibility to solve the problem. This is where DIUx played a crucial role in this story. Defined responsibility is crucial in these types of problems to avoid the bystander dilemma, where everyone assumes that someone else has the responsibility to solve the issue at hand, and the organization is paralyzed by confusion. Raj Shah accepted responsibility for solving the problem on behalf of DIUx. Then Lieutenant Colonel Oti was tasked to form a team with the right skillset to create a tailored solution specifically for the tanker planning process. He cast a wide net and assembled a technically competent team of active-duty service members and private sector employees, all with some level of programming experience. Finally, the DIUx team physically traveled to the CAOC, breaking

through the geographic separation issue, for a face-to-face assessment of what the tanker planners and operational users required from an automated software solution. For the next three months, the DIUx team iterated solutions with the tanker planners, while simultaneously refining their specified requirements, until they delivered a viable operational solution. Normally, requirements flow across numerous levels and organizations within DOD while competing with other priorities and subjective assessments by nonoperational executives. Typical requirement procedures resulting in funded acquisition projects may take over a year at the fastest to initiate let alone complete. Lieutenant Colonel Oti and the DIUx team delivered a working solution in three months by forming a team with the right skillset, defined responsibility, and operational focus.

Finally, the procedure branch of figure 13.1 represents the classical federal acquisitions procedures to contract and fund defense industry performers to develop a solution for the operational warfighter. The DOD acquisitions framework was developed to leverage the US industrial base to build and deliver large scale instruments of war, such as airframes, tanks, and munitions. Therefore, Congress wrote the FAR to ensure fair competition among contractors, robust systems engineering, efficient manufacturing, and sustainable supply chains. The FAR is optimized for big programs delivering physical hardware products. None of these factors are top priorities in information-based, technical problems, such as the tanker planning process. Treating the CAOC as a giant system and outsourcing innovation to large defense contractors created a procedure that failed with two different contractors in four years and squandered over one billion dollars combined.[19]

The systemic problems regarding acquisitions require executive federal-level modification to the FAR and were clearly beyond the scope of what the DIUx team could address. Therefore, they avoided the classical procedure altogether by using other transaction (OT) authority to fund contractor support from Pivotal Inc. OT contracts are not new; they were created by the NASA Space Act in 1958 to provide an alternate funding vehicle for the federal research and development (R&D) community to pursue rapid innovative partnering with nontraditional federal contractors.[20] Federal authorities granted DOD permission to use OT authorities for R&D in 1989 and prototyping in 1994. Since DIUx already partnered with the Army Contracting Command-New Jersey to issue OT contracts before the DIB's

visit to the CAOC, Pivotal Inc. was already on contract with DIUx working similar tasks for C2 R&D. The combined AF/Pivotal team developed the Jigsaw software application, with government-purpose rights to the application, so that other governmental teams may continue modifying and improving the tool beyond their partnership with Pivotal. Note that government-purpose rights are not required with OT contracts. Intellectual property rights are normally formalized during the contract negotiation process, whether using OT or FAR contracts. In summary, DIUx rapidly funded Pivotal Inc. with flexibility to begin software prototyping without delay and avoided the problems listed in the procedure branch of figure 13.1. Had DIUx started a FAR-based contract to assist with software development, it would not have been awarded for at least a year at the fastest.

**Note on Linking Networks: Ports and Protocols**

Deconflicting network protocols and accessing ports were not an issue in the Jigsaw/tanker planning case study, because the CAOC operates within its own CENTCOM ecosystem where the CFACC has responsibility over the network with authority delegated to subordinate levels. Of course, the CENTCOM network must adhere to DOD policies regarding IT but maintains decisional authority within that framework. Port and protocol differences become significant problems if developing applications meant to reach across numerous geographical sectors and CCMDs.

The virtual handshake required to create an operational data thread between two different networks is subject to scrutiny from numerous DOD parties. For example, imagine that a software application is meant to share analyzed results regarding weapons of mass destruction in real time between CENTCOM and Northern Command (NORTHCOM). Not only must the A6/J6 offices coordinate between CENTCOM and NORTHCOM to agree upon common standards, protocols, and which ports to open, but the Defense Information Systems Agency must also concur now that connections and routing fall within their purview. Three separate groups, each with their own layers of approval, must agree unanimously on how to create this data thread. If just one group nonconcurs with the plan, then the port and protocol process return to ground zero. It is unlikely the Jigsaw application would have been unanimously approved for

operational use in such a disjointed situation with numerous peer IT stakeholders.

## Recommendations

On the basis of the underlying issues either addressed or avoided by the Jigsaw case study, this work recommends the following considerations, in order, from most to least pressing:

- Embed a small team of diverse technical experts within the CAOC (referred to here as Mission IT [MIT]), empowered to write computer algorithms and solve data-centric problems.[21] Such a team would enable the CAOC to innovate at the operational timeline against a technically savvy adversary. The MIT team should be composed of a balance of technical members, such as, but not limited to, 17D Cyber Operators, 61A Operational Analysts, 61C/D Scientists, 62E Developmental Engineers, and 63A Program Managers to incorporate a knowledge base spread across numerous technical disciplines. All must have at least an intermediate knowledge of computational programming. The chief of the MIT team should also be empowered to push algorithm products from the developmental partition to the operational side for routine use as needed. The key component of the MIT team is that they work in proximity with the operators and battle managers, having daily interactions with each other. This team is not meant to produce operational software but rather to solve technical information problems which may be one-off occurrences or persistent hinderances to operational efficacy. Longer-term algorithmic development for more difficult projects should be pushed to a reach-back production cell, like Kessel Run, through a rapid-requirements process with the MIT team dual-hatted as the operational customer representatives.

- Rather than abstractly advocate for a "combat cloud," this work recommends a well-defined, ground-up approach where two CAOCs on separate networks, perhaps the CENTCOM CAOC and the Shadow AOC at Nellis Air Force Base (ShOC-N), install a developmental server at each location utilizing virtual machine protocols so that the two servers act as one computer with redundant shared storage. This way software developments get pushed to both servers simultaneously and exist redundantly

on both. With this setup, software keeps functioning separately on the individual servers when communications are broken and then synchronize once the connection is restored. The proposed development model is to start small and manageable and build out from there. Think of this step as digging a lake, starting from a pond. The difficulty here is not technical but in the administrivia required to navigate the ports and protocols between the two networks. All steps to connect the two networks should be documented along the way so that the action team may conduct a root cause analysis of networking problems upon conclusion, like in figure 13.1, but specific to linking various AOCs through a distributed cloud system.

- Locating the CAOC within the continental United States may solve many of the root issues found in the environment branch, but it may also introduce new unforeseen problems yet to be discovered. If the CAOC continues to reside within a stable CENTCOM country like Qatar, then consider extending deployments from one year to accompanied tours of 18 months or two years for key CAOC leadership. Core positions for CAOC staffers could be extended to short tours of one year in duration rather than the typical four- to six-months deployment. Longer tours of duty will enable greater continuity and ownership of operational problems. This will also allow members to develop their specific duty skillset through longer on-the-job training not possible with short deployments less than one year in duration.

- The tanker planning problem is but one example within a class of informational problems solved with improved computer algorithms funded through rapid contracting vehicles. Operational teams will continue to use OT contracts more frequently as the rate of change within competition increases. Therefore, the AF should create an equivalent group specializing in OT contracts similar to the group within Army Contracting Command–New Jersey, simply because one cannot expect Army Contracting to handle the entirety of DOD OT contracting demands. Army Contracting will rightly prioritize Army requirements when they become overburdened with OT work. The AF needs its own shop specializing in OT contracts. Such an OT contracting shop could handle Space Force requirements as well.

# Conclusion

Future conflicts will be won and lost as a result of the speed and efficacy of one's ability to collect data, analyze the data to produce estimates, and exploit the resulting information for enhanced operational action. To gain the leading edge, all AOCs must shift toward orienting themselves to maximize innovation for informational problem solving, as opposed to the classical configuration of efficient application of physical mass. Making this shift can be difficult, especially when the status quo provides operational superiority, because innovation introduces a level of risk that must be accepted. Sound developmental practices and robust testing reduce overall risk, but there is always a baseline of risk present when attempting something fundamentally new. Therefore, institutional barriers to change may be as difficult, or more so, to solve than the direct information-based problem itself.

Updating the tanker planning process during OIR provided an excellent example of solving informational problems, even when the status quo enabled superiority. The general characteristics of this case study are applicable to the broad category of exploiting information for operational gain. A root cause analysis of the tanker planning process suggests that the CAOC will improve its orientation for innovating solutions by: 1) imbedding a small technical team within the CAOC with diverse skills and defined responsibilities to solve information-based problems, 2) networking IT resources with other AOCs by starting small between two operations centers and documenting institutional barriers encountered along the way, 3) extending assignment lengths at the CAOC to encourage ownership of organizational impediments and improve continuity of knowledge, and 4) for the Air Force to identify a lead contracting office within the service to specialize in OT authority contracts that are critical to expediently fund innovative solutions. These recommendations may improve the ability of operation centers to rapidly solve problems and incorporate solutions that are primarily based upon exploiting information.

### Notes

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18. Oti discussion.

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21. Credit for the name and concept attributed to the Mission Information Technology (MIT) Branch of the Joint Improvised Defeat Organization's (JIDO) J6 Department. JIDO is now a directorate within the Defense Threat Reduction Agency.

Chapter 14

# The Liberation of Mosul

## Lessons for Future Air-Centric Warfare

*Michael Landers*

*Although conflict, violence, and war endure, the methods through which political goals are pursued are always evolving. How this change in the character of conflict will play out and what the Joint Force must do to prepare to meet the demands of tomorrow requires our collective attention.*

Joint Operating Environment 2035

## Introduction

Airpower will increasingly influence future warfare—whether small-scale counterinsurgency operations or large-scale, near-peer conflict. The lessons of history suggest this, and the air campaign to liberate Mosul was no different. From its inception, airpower has changed the character of war. In the words of the early airpower theorist Giulio Douhet, "Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur. . . . [Airpower], emphasizing the advantages of the offensive, will surely make for swift, crushing decisions on the battlefield."[1] Douhet, along with other airpower prophets like Billy Mitchell, James Molony Spaight, and Hugh Trenchard, all contended that an independent air force capable of winning a war through aerial bombardment was necessary for national security.[2] The ability of strategic bombing to win a war independent of significant American ground or naval participation has been argued and debated since the birth of airpower; however, advancements in airpower technology make air-centric campaigns a viable option for policy makers.

The political elite now view airpower as a low-risk, low-commitment option, and the military instrument of national power has become the "easy button" for American foreign policy. The destructive effects

of the air campaign during Operation Desert Storm have dovetailed into an era of air-centric military engagements including Operations Allied Force, Odyssey Dawn, and Inherent Resolve. Previous Deputy Assistant Secretary of Defense Thomas Mahnken writes, "The much greater precision, range, and destructiveness of weapons could extend war across a much wider geographic area, make war much more rapid and intense, and require entirely new modes of operation."[3] He additionally states, "Airpower coupled with [precision-guided munitions] appeared to offer the ability to coerce Iraq, intervene in the Balkans, and retaliate against terrorist groups while avoiding the difficult decisions associated with a sustained commitment of ground forces."[4] In Eliot Cohen's words, "Airpower is an unusually seductive form of military strength, in part because, like modern courtship, it appears to offer gratification without commitment."[5] Modern advancements in technology provide the American military with the capability of striking most adversaries from the air with near impunity. Politicians have discovered the proper application of airpower can achieve their objectives and, at times, the objectives of allies and coalition partners. "Airpower can empower indigenous ground forces to fight successfully and can underpin the effectiveness of other instruments of national power."[6] Finally, "airpower seemed uniquely suited to the types of conflicts in which the United States was involved—wars for limited aims fought with partial means for marginal interests."[7] The air force designed for full-scale conventional and nuclear war with the Soviet Union has excelled in these smaller modern engagements. Future conflict employing an air-only instrument of national power is likely as the United States will continue proxy competition with near-peer adversaries.

Starting in 2014, a US-led coalition of fighters, bombers, and unmanned aerial vehicles blanketed the deserts of Iraq and Syria to degrade and eventually defeat the self-proclaimed caliphate of the Islamic State of Iraq and Syria (ISIS) or Da'esh (its Arabic acronym). In rural areas, airpower exclusively targeted ISIS nodes while indigenous forces heavily supported by coalition air liberated urban strongholds. "It is the Air Force, however, that has been the principal military instrument in this fight. The Air Force's victories over the last 25 years and longer have paved the way for ultimate success against ISIS."[8] The use of American airpower void of a significant American ground or naval presence supporting a partner nation's struggle for its sovereignty is unique. The air campaign to liberate Mosul was tactically

effective but at an excessive cost to the Iraqi Security Forces (ISF), coalition war-ready reserves, and Iraqi civilians. Capturing and implementing lessons from the United States' air campaign from 2014 to the liberation of Mosul from Da'esh control in 2017 will increase lethality in any future air-centric fight. Specifically, executing proper strategy with airpower leaders, reinvigorating the Air Force's targeting enterprise, and rethinking fire support coordination measures are critical to future campaign success.

## Liberation of Mosul

Operation Eagle Strike, the battle to free Mosul from ISIS control, began on October 16, 2016. An estimated 108,500 Iraqi-led troops surrounded and entered the besieged city from the east to liberate it from a force of 3,000 to 5,000 Da'esh fighters.[9] With a population of two million people, Mosul was the largest and last significant Da'esh-controlled urban area in Iraq. ISF were the primary liberators supported by a dense network of coalition fighters, bombers, and surveillance platforms providing a multi-dimensional advantage. ISIS fighters equipped with heavy machine guns, rocket-propelled grenades, recoilless rifles, and mortars enjoyed freedom of movement throughout the city prior to the operation. During the two-year delay to rebuild, equip, and train the decimated Iraqi military before Operation Eagle Strike, Da'esh forces were able to construct "an elaborate series of defensive works inside the city, fortifying buildings, blocking avenues of approach, creating obstacles, and constructing underground shelters and tunnels."[10] They countered the coalition's asymmetric advantage by effectively deploying vehicle-borne improvised explosive devices, primitive chemical weapons, and modified commercial unmanned aerial vehicles. The most alarming strategy for ISIS to defend their self-proclaimed caliphate was using civilian human shields throughout the campaign to restrict coalition air strikes.[11]

The Combined Joint Task Force–Operation Inherent Resolve (CJTF-OIR) Commander, General Stephen Townsend, stated to journalists, "This is the most significant urban combat to take place since World War II; it is tough and brutal. House-by-house, block-by-block fights."[12] The eradication of Da'esh in Mosul lasted nine months at a significant cost to Iraq's most capable counterterrorism forces, the US and coalition's supply of precision munitions, and innocent

citizens trapped within the city. The ISF suffered over 10,000 fatalities (10 percent of its initial strength) fighting urban warfare. The coalition dropped an estimated 29,000 precision-guided munitions during 1,250 strikes in the city.[13] The United Nations estimates Mosul needs more than $1 billion just to restore electricity, sanitation, water, and other basic infrastructure.[14] More significantly, the Associated Press reports 9,000 to 11,000 civilians, wedged between Daʿesh and the ISF, perished during the conflict—one-third of those as a result of unintended, second-order effects of coalition bombardment.[15]

**Strategy and Leadership**

Without an effective strategy, a nation can fight a war for war's sake. Geopolitical author and professor Colin Gray wrote, "Strategy is the bridge between policy and armed conflict."[16] He recommends, for strategic success, forces must be internally coherent and employed coercively in pursuit of military objectives that fit political goals.[17] Since the end of the Second World War, the United States has fought wars for limited aims with partial means for marginal interests.[18] Gray suggests, "The United States does not really do strategy. Rather, it tends to jump straight from policy to operations and tactics."[19] Despite possessing overwhelming military power, the United States has sometimes struggled to achieve political objectives owing to an inability to formulate effective strategy. As the US learned during the Vietnam War, if airpower is used to meet political objectives, politicians cannot unnecessarily restrict it. In Vietnam, President Lyndon B. Johnson approved the targets to be hit, what weapons to use, and in some cases even the route to be used by the airplanes to prevent a Chinese or Russian intervention.[20] Additionally, when the political restrictions are lifted, airpower experts need to be in the lead for planning and execution. The American air campaign to liberate Mosul initially mirrored these strategic shortfalls.

The US troop withdrawal from Iraq in 2011 combined with Iraqi sectarian division and political impotence opened the door for ISIS. Daʿesh fighters took control of Mosul in 2014 and established their self-proclaimed caliphate. This project does not analyze the political decision to withdraw US troops from Iraq in 2011 or the initial response to the rise of Daʿesh. Focus instead is on the development and evolution of US strategy and military execution starting with the fall of Mosul in 2014. The publicly stated goal during the kickoff of Op-

eration Inherent Resolve was "to degrade and ultimately destroy [ISIS] through a comprehensive and sustained counterterrorism strategy so that it's no longer a threat to Iraq, the region, the United States, and [US] partners."[21] In a policy innovation memorandum from Max Boot, a senior fellow for national security studies at the Council on Foreign Relations, he determined the president's strategy in Syria and Iraq was ineffective. "The president is hoping that limited air strikes, combined with US support for local proxies . . . will 'degrade and ultimately destroy' [ISIS]."[22] Hope is not a strategy, and degradation of an enemy is not easily measurable. The reluctant application and gradual escalation of force concerned politicians and military leaders. Secretary of Defense Ash Carter reflects, "It was a list, not a strategy. There was no sequence, no moving picture showing the path we would take and where it was leading, that our troops and the public could see and feel."[23] Before being nominated as the next Secretary of Defense, retired Marine General James Mattis said the war on ISIS is "unguided by a sustained policy or sound strategy [and is] replete with half-measures."[24] Retired Marine General Anthony Zinni was more blunt. "It's a bad strategy, it's the wrong strategy, and maybe I would tell the president that he would be better served to find somebody who believes in it, whoever that idiot may be."[25] Anthony H. Cordesman, a chair in strategy at the Center for Strategic and International Studies, authored strategy reviews before, during, and after the liberation of Mosul. As he states, "The US has shown that airpower can have a critical tactical effect in some cases in both Iraq and Syria. But it has failed [to] show it has anything approaching a credible strategy for using airpower."[26] The result was an air campaign whose overall strategic effectiveness was limited and somewhat resembled Operation Rolling Thunder from the Vietnam War—strategic incrementalism in the air: "The United States has deployed significant air combat forces, but these too have made incremental increases in combat activity that seem largely reactive and lacking in any public explanation of the strategic rationale for such operations, their impact on air-land operations, and how operations in Iraq and Syria are structured to produce some unified concept of operations."[27]

Cordesman warned, "The US failure to provide decisive force on a timely basis has extended its wars, created massive human suffering and added civilian casualties, and sharply increased the risk that tactical victories can still end in grand strategic losses."[28] The best way to liberate a city is to keep it from being conquered in the first place. The

gradually escalating air campaign that started three years after the withdrawal of US troops allowed Da'esh to seize the initiative and extended the campaign.

When military operations commenced against ISIS in 2014, President Barack Obama declared US ground troops would not be directly involved in combat operations. Apart from a small number of special operations forces embedded with the ISF, the American contribution to the campaign against the Islamic extremists was dominated by airpower.[29] The fact that American Airmen were employing lethal force deep into Da'esh-controlled territory did not meet the president's "combat operations" criteria. Strategist Colin Gray argues, "For the airpower advantage to secure strategic results of value, it must serve a national policy and a grand and overall military strategy that are feasible, coherent, and politically sensible."[30] When asked about expanding airstrikes into Syria three weeks into the Iraqi bombing campaign, President Obama told reporters, "I don't want to put the cart before the horse: we don't have a strategy yet."[31] Carl Von Clausewitz defines war as merely the continuation of politics by other means.[32] Without a coherent political strategy from the White House, military planners were unable to effectively leverage airpower against Da'esh, allowing the terrorist group freedom of maneuver and the ability to secure its self-proclaimed caliphate. Gray also states, "US national security policy and possibly its national security strategy, as well as its overall national military strategy, may all be so dysfunctional that they cannot be rescued from defeat by dominant airpower, no matter how that airpower is employed."[33]

The negative effects of dysfunctional strategy at the onset of the American fight against ISIS were compounded by the selection of US Army generals to lead the campaign. Although airpower was the primary American contribution to eliminating ISIS, the four consecutive commanders of CJTF-OIR were US Army generals. Retired Air Force Lieutenant General David Deptula voiced his criticism of these decisions, "The US Army's component for US Central Command (USCENTCOM) wouldn't put an Army division commander in charge of a Navy aircraft carrier battle group yet has no problem with putting an armor corps commander in charge of an air campaign."[34] Tension between land and air component leaders goes back to the evolution of the Air Force into its own military branch during World War II.

Making airpower subordinate to a ground commander was the ultimate heresy for an air force whose very independence had hinged on two tenets that were first promulgated in the 1943 Field Manual 100-20, Command and Employment of Airpower, which proclaimed in all capital letters that "LAND POWER AND AIRPOWER ARE CO-EQUAL AND INTERDEPENDENT FORCES; NEITHER IS AN AUXILIARY OF THE OTHER." Furthermore, "CONTROL OF AVAILABLE AIRPOWER MUST BE CENTRALIZED AND COMMAND MUST BE THROUGH THE AIR FORCE COMMANDER IF THIS INHERENT FLEXIBILITY AND ABILITY TO DELIVER A DECISIVE BLOW ARE TO BE FULLY EXPLOITED."[35]

Lt Gen Deptula suggests if Airmen were in charge, especially starting in 2014, the air operations against Da'esh likely would be designed as an air campaign against a state rather than the counterinsurgency (COIN) campaigns previously executed in Iraq and Afghanistan. The air campaign eventually transitioned into a proto-state approach with strategic bombing playing a significant role in the international campaign to debunk the "strong caliphate" narrative. As the coalition destroyed headquarters, bomb factories, and banks, ISIS found it harder to sell a narrative of victory to recruits. Lt Gen Deptula suggests that implementing this strategic approach beginning in 2014 would have yielded better results: "Perhaps then the Islamic State would have been nullified in three months instead of taking three years. Completing that operation rapidly, we would not have given the Islamic state the gift of time—over three years to perpetuate their ideology of evil and spread it to over 30 additional countries, or time to allow terrorists to move out of Syria, or time to continue the slaughter of innocent men, women, and children in the region."[36]

The inability of Iraqi forces to prevent Da'esh occupation of Mosul and the eventual nine-month campaign to liberate Mosul invalidated the COIN strategy chosen by senior military leaders. According to Lt Gen Deptula, "to capitalize on the potential true value of jointness, air forces need to have a seat at the table in option development, planning, and execution of joint operations and command of forces and organizations where most appropriate."[37] The Air Force must continue to develop its senior officers to lead a joint task force to provide options for Airmen to fill key billets when an air-centric campaign is needed.

A criticism of the Air Force is that their senior leaders are incapable of leading a joint task force. During the 2016 Air Force Association conference, General David L. Goldfein highlighted, "We're going to step back and take a look at the development of our officers and our enlisted corps . . . to ensure that we are actually looking at the business of combined arms . . . and either join with or lead a joint task force to be able to optimize those components and build a campaign that's truly joint in nature."[38] As part of the Air Force's strategic initiative to strengthen joint leaders, the Ninth Air Force transitioned in 2018 to certify as a JTF-capable headquarters. The Ninth Air Force Commander, Major General Scott Zobrist reports, "We will continue to participate in multiple internal, service, and combatant command exercises to provide the joint force with a service-retained, worldwide deployable addition to the joint Global Response Force."[39]

The air-centric campaign during the ISIS occupation of Mosul from 2014 to its liberation in 2017 highlights the importance of developing a coherent strategy prior to execution. The result of a flawed initial strategy was the selection of a COIN approach versus a strategic bombing campaign to defeat a proto-state. Developing Air Force senior officers to lead a JTF will ensure more airpower advocates are available to command the likely air-centric military operations of the future.

**Targeting, Engagement Authority, and Civilian Casualties**

As John R. Glock notes, "While efficiency may be a peacetime measure of merit, effective targeting remains crucial to applying aerospace power. Targeting remains one of the easiest and most cost-effective means of preserving our diminishing resources before the first weapon is committed. Yet the Air Force is in danger of forgetting that targeting is a unique, critical function."[40]

The Air Force's inability to generate an effective strategic bombing campaign to counter Da'esh in 2014 should not surprise anyone because there is a cycle of targeting neglect that occurs during interwar periods. The most recent downward trend was exaggerated by the Air Force directly supporting ground forces for almost two decades. Continued air superiority atrophied the service to a close-air, support-only capability where kinetic weapon employment required ground force commander permission. Lt Gen Deptula writes, "We should all be very mindful that a generation of occupation-based, ground-centric, military strategies seeking to win hearts and minds . . . has

created a dearth of articulate airpower practitioners and advocates in the ranks of the US armed services. Airmen of the past two decades have been lured into a mold of compliance and silence."[41] The liberation of Mosul witnessed a shifting focus by the service back to the art of target nomination and development. Rebuilding the targeting enterprise will reverse the effects of two decades of COIN operations and prepare America for future air-centric campaigns. The Air Force's ability to generate deliberate targets in support of a strategic air campaign, such as during the Combined Bomber Offensive of the Second World War, has a history of atrophy during interwar periods.

World War II demonstrated that the proper selection of vital targets, through rational planning based on the systematic study of available intelligence, is critical to the successful application of airpower.[42] Unfortunately, the Air Force's targeting enterprise has been a victim of every interwar period that followed. The former Assistant Chief of Staff of Intelligence, Major General John B. Marks, noted, "In the past, to our sorrow, we have had to relearn several times that targeting is a key element in both peacetime readiness and wartime effectiveness."[43] Before the outbreak of the Korean War, there was no organization maintaining or analyzing the North Korean target base. Only 53 out-of-date target folders existed, and an inadequate number of trained intelligence personnel supported the targeting function.[44] Before Vietnam, targeting was centralized at the Defense Intelligence Agency, and they "largely ignored conventional targeting applications in the nuclear age."[45] Desert Storm showcased an improved targeting process before execution, but shortly after the war, the targeting officer career field was eliminated because of manpower and budgetary constraints.[46] The targeting enterprise once again was dysfunctional before the rise of ISIS and their occupation of Mosul.

Senior leadership of the Air Force in 2012 acknowledged the service's insufficient targeting capacity and developed the Air Force Targeting Roadmap (AFTRM).[47] The regeneration of the Air Force targeting enterprise was in progress at the start of hostilities with ISIS. "Following a decade of sustained support to dynamic targeting, the Air Force is well versed in this brand of targeting for counterinsurgency operations. But the service lacks the skills to apply tactical tradecraft to deliberate target development. This realization led to the development of a 2012 [AFTRM], which concluded the 'capability and capacity to adequately conduct deliberate planning and support air operations has atrophied.' "[48]

The 2012 road map identified five key focus areas: targeting requirements and production capacity; reachback and distributed operations; systems, tools, and architectures; education and training; and force management.[49] It identified "the Air Force lacks codified targeting processes, systems, and enterprise-wide personnel management to successfully implement reachback and distributed targeting operations with the air component or larger combatant command."[50] The growth of a reachback capability to Langley Air Force Base has been significant over the past decade, but distributed capability still requires attention if reachback capability is severed during a near-peer conflict. In a 2015 Air Force Lessons Learned (AFLL) report on the targeting enterprise, an anonymous intelligence general officer stated, "If we want to only be responsive to insurgent warfare, we're OK. Looking out the window and talking to a JTAC [joint terminal attack controller] works. But deliberate targeting takes significant effort and skill, and we don't possess it currently. We will be asked to do [deliberate targeting] in the future. We can't even assess and use all the tools in our kitbag today. We've become a reactive force."[51] The AFLL report concluded the Air Force has made significant investments and worked to address some of the challenges contributing to a lack of targeting capability and capacity, but more action is necessary.[52] Additionally, the liberation of Mosul reinforced the idea that dense urban terrain makes intelligence preparation of the environment much more difficult.[53] The combined effect of slow-developing strategy and the limited intelligence capability resulted in a shortage of deliberate targets, significantly hindering the coalition's ability to shape the battlefield before the liberation of Mosul started. The air campaign to defeat ISIS was more reactive than proactive.

In this mid- to high-intensity, complex, urban fight, dynamic targeting outnumbered deliberate targeting by a 9:1 ratio.[54] Deliberate targets were approved during regular targeting meetings. However, over the course of the campaign, the deliberate process proved ineffective because of its lack of responsiveness to the rapidly shifting environment and sluggish vetting timelines. Processing and approving deliberate targets took too long owing to stringent requirements of target development, understanding patterns of life, and positive identification, balanced with considerations of collateral damage and civilian casualties. A hybrid method shortened the targeting cycle and proved more responsive, allowing advanced weaponeering. This

hybrid method maximized effects in support of the scheme of maneuver but deviated from established targeting doctrine.[55]

The Combined Air Operations Center recognized targeting was not meeting the pace of battle during Operation Eagle Strike and developed solutions to reduce planning timelines. The US Army's Mosul Study Group concluded in September 2017, "Accelerating the deliberate targeting cycle to keep up with the speed of dynamic ground operations would ensure more efficient target-weapon pairing and better support to ground operations, leading to a reduction in munition expenditures."[56] Lieutenant General Charles Brown Jr., the Joint Force Air Component Commander, reflected:

> When you ask me what my biggest accomplishment was during this time of my command, [strategic] targeting. That was it. In the last 15 years or so, we've done a lot of close-air support for troops in contact and overwatch, and with the deliberate targeting process we lost a little muscle memory from what we had in the past, so . . . I think this is something that's going to help us in the [area of responsibility] and in other contingencies later on that we as a nation or we as the coalition team may face in the future.[57]

The goal of deliberate targeting is to enable planned strike operations focusing on achieving strategic effects rather than reactionary dynamic strikes usually with limited impacts.[58] The targeting revival has also moved the Air Force from a role as a supporting entity for ground forces to one focused on discovering and disrupting Da'esh critical support networks necessary to organize, train, recruit, and execute the group's strategy.[59] Unfortunately, the process changes were sluggish, extending the campaign and prolonging the suffering of Iraqi civilians. An aggressive, deliberate targeting approach could have kept Da'esh from capturing Mosul and establishing their self-proclaimed caliphate.

Deliberate targeting was almost nonexistent during the operation to liberate Mosul. The lack of a robust targeting enterprise before the conflict combined with an initial COIN approach limited the ability to generate a comprehensive target list. Once hostilities commenced, the preponderance of limited targeting capability shifted to dynamic, time-sensitive targets. "Many of the past 15 years of observations have been in a counterinsurgency fight in which targeting focused on integrating and synchronizing joint fires in assisting the maneuver of

joint forces and in an interdiction role."[60] Deliberate target development stalled, and those targets were often pulled from the shelf to be engaged in a dynamic strike.[61] Joint Publication 3-60 states timing is the primary factor determining whether to use deliberate or dynamic targeting.[62] The actual targeting process does not change between the two. Therefore, with limited targeting capacity, planners should develop deliberate targets before a conflict, and dynamic targets should be the sole weight of effort after deliberate targets are exhausted.

As best stated by the 2012 road map, "Success in revitalizing Air Force targeting capabilities depends on sustained commitment by senior Air Force leadership."[63] Targeting is a core competency of the Air Force and is critical to effective strategic bombing campaigns. "Targeting helps translate strategy into discrete actions against targets by linking ends, ways, means, and risks. It is a central component of Air Force operational art and design in the application of airpower."[64] According to Douhet, "the choice of enemy targets is the most delicate operation of aerial warfare."[65] As past wars and the liberation of Mosul exemplify, victory in future US air-centric warfare requires a robust targeting enterprise and a doctrinal review of when deliberate versus dynamic targeting processes are employed.

Another significant decision executed late in the conflict was the 26 December 2016 issuance of Tactical Directive #1, delegating fires approval to ISF ground force commanders.[66] In 2014, deliberate and dynamic airstrikes were approved at the four-star general level in Tampa, Florida. With the formation of Strike Cells in Iraq and Syria during the spring of 2015, target engagement authority was delegated to the one-star level. With Tactical Directive #1, according to Maj Gen Joseph Martin, the joint force land component commander, "The responsibility was placed in the hands of the commanders on the battlefield so they can make timely decisions. Previously, every target struck had to be approved by a brigadier general, which didn't make sense. You have to delegate authority to get things done. You must trust your subordinates!"[67] Suddenly, mission command flourished, and emerging deliberate targets were employed dynamically with quickened response times at record numbers.[68] East Mosul was liberated up to the Tigris River, but the Da'esh stronghold in the "Old City" of West Mosul remained. Gen Tony Thomas of the US Special Operations Command highlighted an escalation in strategy with marching orders now from Secretary Mattis coinciding with Tactical Directive #1: "It was [initially] 'defeat ISIS.' It's now 'annihilate ISIS.' I

think he put a non-doctrinal term out there to amp up the volume a little bit. We all got the message."[69]

The laws of war, military professionalism, and the American public's aversion to killing innocents during two decades of COIN operations in Afghanistan and Iraq drove the Pentagon to impose an absolute restriction on civilian casualties at the onset of the air campaign against Da'esh.[70] This created targeting challenges that emanated from a paradox: "Targeting accuracy has reached an unprecedented level, but so too has the societal demand for risk mitigation, precisely because of such capabilities"[71] During the early stages of Operation Inherent Resolve, the Obama administration placed the same absolute restriction on civilian casualties. The risk of civilian casualties is one of the reasons that the four-star level held the authority for airstrikes early in the campaign. Fully aware of coalition bombing restrictions, enemy fighters not only refused to wear uniforms, but they also often did their best to blend in with the civilian population. Rather than congregate in isolated outposts, they clustered in mosques, around hospitals, and even in private homes. Attorney and journalist David French notes, "While such tactics are frequent in guerrilla warfare, they are neither legal nor moral, and our jihadist opponents have reached appalling lows even by the rough and brutal standards of insurgencies."[72] Most notable was their use of human shields.

Anthony H. Cordesman noted concerns about unduly restrictive combat leadership: "If an air campaign is too limited, or is too restricted in targeting and rules of engagement, minimizing immediate casualties can mean a massive cumulative rise in total casualties, displaced persons, refugees, and atrocities over time."[73] The goal is to protect the innocent, but many analysts and military strategists agree it went too far. The argument lies on the restrictions of discrimination in the Law of Armed Conflict. Discrimination includes the ability to provide direct kinetics and kill the enemy while avoiding the civilian population in the direct line of fire. French agrees that overly restrictive rules of engagement "not only create an additional incentive for enemy law-breaking, they ultimately lead to mass-scale civilian casualties at the hands of unconstrained jihadists."[74] Eventually, leadership relaxed the restrictions, allowing airstrikes in an urban center like Mosul.

When the change occurred and exactly what the change was remains classified. However, senior defense officials anonymously have told journalists that military leaders operating against ISIS autho-

rized strikes where up to 10 civilians may be killed if it was deemed necessary to destroy a critical military target.[75] Those officials said the change was made because of concerns that military targeting was not aggressive enough. "Without the coalition's air campaign against ISIS, there would have inevitably been additional years, if not decades of suffering and needless death and mutilation in Syria and Iraq at the hands of terrorists who lack any ethical or moral standards."[76] The change to the rules of engagement facilitated effective air support over Mosul but years after Da'esh fortified their defensive positions.

The air-centric campaign to liberate Mosul highlighted an atrophied targeting enterprise, unduly restrictive engagement authorities, and an absolute restriction on civilian casualties, significantly handicapping the asymmetric advantage of American airpower. Continued investment in the Air Force's targeting enterprise during the interwar period will ensure the effective application of airpower. Likewise, delegating target authority to the lowest practical level early in a campaign will allow mission command to flourish. Finally, although unfortunate, the risk of civilian casualties in urban areas should be mitigated but not prohibited in future air-centric campaigns when necessary to quickly eliminate a threat like ISIS.

**Fire Support Coordination Measures**

The liberation of Mosul showcased the asymmetric advantage air superiority has on an occupying ground force, even in a dense urban environment. However, American fighters, bombers, and armed drones were not the only source of kinetic effects available to the Iraqi military. Long-range artillery, helicopter gunships, and indigenous mortars had to be deconflicted from the steady barrage of airstrikes. Fire support coordination measures are designed to synchronize the kinetic effects from multiple services on a common objective.[77]

The fire support coordination line (FSCL) is a fire support coordination measure delineating coordination for the attack of surface targets between the joint force land component commander (JFLCC) and the joint force air component commander (JFACC). The FSCL is established and adjusted by the JFLCC or amphibious force commander and requires careful consideration to strike a balance to not inhibit operational tempo while maximizing the effectiveness of interdiction assets.[78] The FSCL does not determine mission types and is seen by both components as a restrictive measure when operating

beyond the control measure limit. Recent conflicts have normalized FSCL placement as the range limits of indirect fire support systems. Today, the Army Tactical Missile System, the multiple-launch rocket system, and Apache helicopter are extending the range the JFLCC can affect from ten to fifteen kilometers beyond the front lines to over one hundred kilometers.[79] The extended range of the Army's organic fires increases the range of control desired by the JFLCC into areas previously owned by the JFACC.

Marine Corps units prefer placing the FSCL close to the forward edge of the battle area so organic indirect fires can range most targets short of the FSCL and organic air assets have maximum freedom to engage targets beyond the FSCL.[80] Marine Corps units conducting operations parallel to the army do not possess comparable long-range indirect fire assets, creating an enemy sanctuary short of the FSCL. The Marine Corps solution is a battlefield coordination line exclusively using Marine aviation to fill the void.

Operational failures over the past two decades highlight the importance of deliberate FSCL placement to optimize the integration and synchronization of air assets with maneuver. During Desert Storm, XVIII Airborne Corps advanced the FSCL well north of the Euphrates River to reserve the area for attack helicopter operations unconstrained by JFACC control. This overextension of the FSCL hampered airpower's ability to destroy escaping Iraqi forces for 15 hours until commanders could pull it back.[81] Similarly, the FSCL during Operation Iraqi Freedom was placed beyond the range of land fires to accommodate the anticipated rapid movement of ground forces in Iraq. The overextended FSCL created a sanctuary for enemy forces due to an inability to observe adversary targets and detailed integration did not exist beyond the range of organic fires.[82]

The liberation of Mosul from ISIS during Operation Inherent Resolve included a FSCL extended 20 miles beyond the forward line of own troops (FLOT), reducing airpower capability.[83] US-led coalition airpower could not attack key ISIS nodes in the city without coordination with the ground force commander (GFC). Understandably, the GFC was more interested in supporting the slow advance of ISF forces leaving much of the Da'esh-controlled city unmolested. Insurgent forces west of the Tigris River enjoyed freedom of maneuver as liberating ISF seized neighborhoods from the east allowing resupply and an eventual retreat into the desert.

After the Liberation of Mosul, the US Army's Mosul Study Group recommended rethinking the application of battlefield geometries, such as the FSCL, to optimize the integration and synchronization of air assets with maneuver.[84] "In the future, determining what separates the close and deep fights is essential to optimizing coalition targeting teams. In the urban fight, understanding that deep and shaping operations may equate to just a few city blocks from the front lines will improve how battlefield geometries, such as the [FSCL], are utilized. Otherwise, suboptimal integration and synchronization of air assets with maneuver will continue to be much higher, air will continue to be constrained and ground effects will continue to be limited."[85] To increase joint lethality, the joint force must understand the purpose, establishing authority, employment, and placement of the FSCL during future campaigns to effectively provide fires with all capabilities possessed by the joint force. The joint force commander should direct FSCL placement during the joint targeting coordination board process to avoid the toxic disagreement that inherently exists between the JFLCC and the JFACC. The optimum placement of the FSCL varies with specific area of operations (AO) circumstances, but considerations include the ground force positions and anticipated scheme of maneuver during the effective period of the FSCL and their indirect fire support systems' range limits, where typically the preponderance of lethal effects on the AO shifts from the ground component to the air component.[86]

An alternative to establishing a FSCL would be the development of a "joint engagement zone" between the FLOT and range limit of indirect fire support systems controlled by a joint air-ground integration center (JAGIC). JAGIC combines an air support operations center with division fires, airspace control, air and missile defense capabilities, and aviation personnel to enable the simultaneous execution of surface-to-surface fires, aerial-delivered fires, and aviation maneuvers.[87] Additional supporting elements to the JAGIC include legal, intelligence analysts, and target development enterprises.[88] A hybrid version of the JAGIC emerged during Operation Inherent Resolve in the form of two strike cells in Iraq and Syria. The strike cells included coalition partners and Iraqi military leadership to synchronize effects and allow the rapid clearance of joint fires, enabling overwhelming firepower against Daʿesh targets. The JAGIC places the decision-makers and liaisons in the same room at the lowest level to maximize lethality and eliminate the requirement to even draw a FSCL on a map.

# Conclusion

"The first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature."[89] It is impossible to predict the character of the next war. It is equally dangerous to plan on the next war based upon the last one. However, we have seen a trend of air-centric campaigns to achieve US foreign policy objectives. To date, there has been minimal open-source analysis covering the campaign to eradicate the Da'esh "caliphate." The only report of significance found by this author is a study completed by the Army.

It took the United States military four years to dismantle the Da'esh-proclaimed caliphate. The pivotal battle was the nine-month, Iraqi-led campaign to liberate Mosul in 2016. Although the coalition successfully eliminated ISIS from the city, it was at an extreme cost. The fighting displaced an estimated 900,000 residents, destroyed critical infrastructure and cultural treasures, and killed more civilians than the total number of Da'esh defenders. If the US is to engage in another conflict using airpower as the primary instrument of the military element of national power, future planners must embrace lessons from the Mosul liberation campaign. Building a robust airpower strategy led by airpower experts, reinforcing the service's targeting enterprise, and reconsidering fire support coordination measures are vital to future success.

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# Abbreviations

| | |
|---|---|
| AADC | area air defense commander |
| AAH | *Asaib Ahl al-Haq* or the Khazali network |
| ABAD | air base air defense |
| AF | Air Force |
| AFCENT | United States Air Forces Central Command |
| AFHRA | Air Force Historical Research Agency |
| AFLL | Air Force Lessons Learned |
| AFRICOM | United States Africa Command |
| AFTRM | Air Force Targeting Roadmap |
| AGI | artificial general intelligence |
| AI | artificial intelligence |
| AiTR | Aided Target Recognition |
| AKP | Justice and Development Party |
| AMD | air and missile defense |
| AO | area of operations |
| AOB | air order of battle |
| AOC | air operations center |
| AOR | area of responsibility |
| AQ | Al Qaeda |
| AQI | Al Qaeda in Iraq |
| ARTF | Airpower Research Task Force |
| ASEAN | Association of Southeast Asian Nations |
| ATC | air traffic control |
| ATR | Automatic Target Recognition |
| CACC | Combined Arms Coordination Center |
| CAOC | combined air operations center |
| CAS | close air support |
| CASEVAC | casualty evacuation |
| CCMD | unified combat command |
| CENTCOM | United States Central Command |
| CFACC | combined force air component commander |
| CFT | cross-functional team |
| CIP | common intelligence picture |
| CJTF | combined joint task force |
| COIN | counterinsurgency |
| CONOP | concept of operations |
| COP | common operational picture |

| | |
|---|---|
| COTS | commercial off-theelf |
| CPA | Coalition Provisional Authority |
| CSAF | Chief of Staff of the Air Force |
| CSAR | combat search and rescue |
| DCA | defensive counter ir |
| DIB | Defense Innovation Board |
| DOD | Department of Defense |
| DODD | Department of Defense directive |
| DRL | Drone Racing League |
| DT | developmental team |
| DTRA | Defense Threat Reduction Agency |
| EA | executive agent |
| EU | European Union |
| FAR | Federal Acquisition Regulation |
| FLOT | forward line of own troops |
| FOB | forward operating base |
| FOC | full operational capability |
| FSCL | fire support coordination line |
| GFC | ground force commander |
| GSAR | ground alert search and rescue |
| GWOT | Global War on Terror |
| HDLD | high-demand low-density |
| HDP | Kurdish People's Democratic Party |
| IDP | internally displaced persons |
| IED | Improvised explosive device |
| IFF | identification, friend or foe |
| IRGC | Islamic Revolutionary Guard Corps |
| ISCI | Islamic Supreme Council of Iraq |
| ISF | Iraqi Security Forces |
| ISI | Islamic State in Iraq |
| ISIL | Islamic State in Iraq and the Levant |
| ISIS | Islamic State of Iraq and Syria, Islamic State of Iraq and al-Sham |
| ISR | intelligence, surveillance, and reconnaissance |
| ISSG | International Syria Support Group |
| JAGIC | joint air-ground integration center |
| JAM | *Jaish al-Mahdi* or, the Mahdi Army |

| | |
|---|---|
| JAOC | joint air operations center |
| JCIDS | Joint Capabilities Integration Development System |
| JDL | Joint Directors of Laboratories |
| JDNO | joint data network officers |
| JFACC | joint force air component commander |
| JFLCC | joint force land component commander |
| JICO | joint integrated control officer |
| JTC | joint targeting cycle |
| JTJ | *Jama'at al-Tahwid wa al-Jihad* (Unity and Jihad) |
| KDP | Kurdistan Democratic Party |
| KH | Kata'ib Hezbollah |
| KRG | Kurdistan Regional Government |
| LAFA | Abul-Fadl al-Abbas Brigade or *Liwa Abu al-Fadl al-Abbas* |
| LPD | amphibious transport dock |
| LSD | dock landing ship |
| MAGTF | Marine Air-Ground Task Force |
| MAJCOM | major command |
| MEU | Marine expeditionary unit |
| MoD | Ministry of Defense |
| MSC | Mujahideen Shura Council or Majlis Shura al-Mujahideen |
| MTTP | multi-Service tactics, techniques, and procedures |
| NATO | North Atlantic Treaty Organization |
| NDF | National Defense Forces |
| NDS | National Defense Strategy |
| NORTHCOM | United States Northern Command |
| NRO | National Reconnaissance Office |
| NSS | National Security Strategy |
| OEF | Operation Enduring Freedom |
| OIF | Operation Iraqi Freedom |
| OIR | Operation Inherent Resolve |
| OPCW | Organization degree for the Prohibition of Chemical Weapons |
| OSINT | open-source intelligence |
| OT | other transaction |
| PACAF | Pacific Air Forces |
| PBS | Public Broadcasting Service |

| | |
|---|---|
| PED | processing, exploiting, and disseminating |
| PGM | precision-guided munitions |
| PJ | pararescue jumper |
| PKK | Kurdistan Workers Party |
| PMF | Popular Mobilization Forces or *al-Hashd al-Shaabi* |
| PPU | Patriotic Union of Kurdistan |
| PR | Personal Recovery |
| PRTF | personnel recovery task force |
| PYD | Democratic Union Party |
| R&D | research and development |
| RF | radio frequency |
| ROZ | restricted operating zones |
| RPA | remotely piloted aircraft |
| RPV | remotely piloted vehicle |
| RWR | radar warning receiver |
| SAR | synthetic aperture radar |
| SCIRI | Supreme Council for Islamic Revolution in Iraq |
| SDF | Syrian Democratic Forces |
| SIDO | senior intelligence duty officer |
| SIPRI | Stockholm International Peace Research Institute |
| SOF | special operations forces |
| SOLE | special operations liaison element |
| SPMAGTF | special purpose Marine air-ground task force |
| sUAS | small unmanned aerial system |
| TLAM | Tomahawk land-attack cruise missiles |
| TRAP | tactical recovery of aircraft and personnel |
| UAS | unmanned aircraft system |
| UAV | unmanned aerial vehicle |
| UNSCR | United Nations Security Council Resolution |
| US | United States |
| USAF | United States Air Force |
| UTC | unit type code |
| VEO | violent extremist organizations |
| WMD | weapons of mass destruction |
| XSAR | combat search and rescue airborne alert |
| YPG | People's Protection Unit |

# Contributors

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Colonel Beckett is the senior policy advisor for the Air Force Reserve to the Reserve Forces Policy Board (RFPB), Office of the Secretary of Defense, Washington, DC The Reserve Forces Policy Board serves as an independent adviser to the secretary of defense, providing advice and recommendations to the secretary on strategies, policies, and practices designed to improve and enhance the capabilities, efficiency, and effectiveness of the seven Reserve components. Prior to this assignment, Colonel Beckett served in various roles including Total Force Integration, Strategic Planning, Programming & Budgeting, and Future Force Design. He originally entered the Air Force as an F-15E Strike Eagle Weapon Systems Officer and amassed over 1,800 flying hours including over 500 combat hours in support of Operation Iraqi Freedom and Operation Enduring Freedom.

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Major Fossum is a US Air Force fighter pilot and strategist. An aeronautical engineering graduate of the US Air Force Academy, Fossum later attained master's degrees in systems engineering and international public policy. He has served as an instructor fighter pilot in T-38 and F-15E aircraft, and accrued over 2,400 flying hours, includ-

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Lieutenant Colonel Vincent is an active-duty scientist in the US Air Force and is currently the director of physics research at the Air

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# Index

While not a sortie-by-sortie account of Operation Inherent Resolve, the coalition air campaign to defeat the nascent Islamic caliphate known as ISIS, this book offers relevant perspectives and insights on a range of political, diplomatic, and military aspects of the campaign. In addition, this book dissects the complex political arena that found NATO allies disagreeing on support for Kurdish forces, while attempting to contain an expansionist Iran and an aggressive Russia, both of whom supported a decaying Syrian regime that willingly used chemical weapons against its own people and generated a refugee crisis that lingers today. The diverse group of authors, consisting of students and faculty affiliated with Air University, explores, among other topics, the role of responsive acquisition, the potential impact of artificial intelligence on Joint All-Domain Command and Control (JADC2), and enhanced postures for combat search and rescue. Collectively, they offer insights on the most recent air campaign to analyze the ever-changing geopolitical landscape, collect valuable lessons learned, and inform future practitioners of air warfare.