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BEHIND THE MAGICAL THINKING

Lessons from Policymaker Relationships with Drones

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Executive Summary

Drones' greatest attraction for the national security world is that they create options where there were none – or none at a cost policymakers feel comfortable with. With a public tired of large scale military interventions, drones and other approaches that gave the U.S. options to study or intervene against security challenges in a low profile, low risk way fit perfectly into the Obama administration's comfort zone. These platforms came to symbolize and enable much of the Obama national security team's approach.

But the enthusiastic embrace of drone technology, particularly in counterterrorism, left some former Obama officials questioning whether they'd been clutching a Pandora's box they should have opened more deliberately. Overall, such "light footprint" strategies generate enduring disagreements about their efficacy, risk, and oversight. Unlike any other recent military platform, drones in particular engender strong emotion - hope, revulsion, overconfidence, demonization - and magical thinking, even among those who know them best. And the attributes that make them so compelling – that they are precise, remote, sensing, and unmanned – may sometimes be too reassuring.

The Trump administration inherited these dynamics, along with the nascent Obama drone policies and array of security challenges – but little of the prior administration's familiarity and comfort with any of them. Whatever history's take on the Obama administration's approach to asymmetric threats, its officials' uniquely close relationship with drones as a platform and immersion in the relevant strategy is unquestioned. Where their policy was flawed, they often believed these flaws were mitigated by their own painstaking attention and oversight.

Trump's team is forging its own path, increasing employment of drones and overall counterterrorism activity while keeping their new policy quiet. But flat rejection of Obama-era approaches is risky. How senior policymakers perceive drones matters a lot in setting our own norms, and policymakers' relationship with these capabilities is itself an entry point for understanding how light footprint approaches are applied. Exploring this foundation – policymakers' blind spots, lessons learned, and good and bad habits – is critical for current and future policymakers.

This paper is the second in a CNAS series dedicated to understanding how 16 years of extensive drone use have affected the dynamics of national security decision-making, based on interviews with former senior officials primarily from the Obama administration.

Key Insights

As a rule, policymakers initially underestimate drones' cost and profile and overestimate their availability, capabilities, range, and "tail" requirements, though some Obama-era officials grew more sophisticated in their understanding of drones over time. U.S. counterterrorism and crisis response approaches have been built on these same assumptions around so-called light footprint warfare's precise impact, as well as low cost, risk, and resource demands. Misunderstanding or downplaying the toll of such approaches will affect policymaker calculations.

Drones allow U.S. policymakers to monitor a situation that might otherwise be entirely off limits - but this access has generated insatiable demand and, with it, risks. Policymakers may place greater faith in the value of real-time information than is warranted. They may be drawn into tactical decisions or intervention in scenarios that might not merit U.S. engagement. And they can underestimate the impact of real-time demands on force structure and human capital, with expectations of certainty that are impossible or unaffordable.

Demand rather than effectiveness and appropriateness often set the pace for drone allocation under the Obama administration, and the efficacy of strategies associated with drones is inconclusive. Policymakers' biggest frustrations with drones were lack of supply and, with it, how best to allocate drones against a range of security challenges. As a result, they uniquely intervened in how and where drones were used.

Lowering the barriers for use of force is both a feature and a bug for drones. Some policymakers argued drones are simply part of a continuum of military techno-evolutions to "project power without projecting vulnerability" - itself responsive to public demands. But drones are unique in their ability to pair persistent ISR and kinetic capabilities into one package without risk to U.S. forces. This package of traits and the comparative secrecy of many drone activities also result in lower public and congressional scrutiny, and limits the feedback loop to policymakers. In the absence of measures of effectiveness, overapplication is possible. Obama officials were concerned enough about the risk that drones would lower the threshold for kinetic action to require dedicated senior policymaker oversight. But reliance on personal oversight has limits: people leave. Moreover, sequential administrations have made it increasingly easy to pursue use of force with limited congressional check. And legal and policy barriers often privilege "easy" kinetic actions at the expense of "harder" non-kinetic ones.

Officials in this study believed drone strikes are precise, but still worried about the potential for civilian casualties - and as the U.S. footprint have evolved, so have the approaches U.S. forces can use prevent and measure civilian harm. Most policymakers believed they'd made serious efforts to prevent civilian casualties to the greatest extent possible and to learn from mistakes. Policymaker concerns were due less to imprecision of strikes and more due to foundational analysis and process. Specifically: how closely civilian policymakers are involved in the definition of targets and review of intelligence; how constrained policymakers have been over time from discussing drone strikes publicly; and how disconnected policymakers are from the aftermath of such strikes. Outside analysts are worried that the government is making bad assumptions about the viability of preventing and measuring civilian casualties with theaters with limited U.S. assets – overhead surveillance and variable partner forces are simply no match for U.S. ground forces for ground truth.

Drones both enabled micromanagement and were themselves ripe for micromanaging - a practice that emphasized the tactical over the strategic. But this intensive oversight had thoughtful rationales. Many officials viewed micromanagement of drones as a necessary evil for establishing norms, and some described their micromanagement as an alternative to external transparency and oversight. But this oversight took enormous amounts of time, allowing less bandwidth for more strategic debate and putting emphasis on direct action against high value targets. The Trump Administration is moving away from micromanagement of military operations, allowing lower level commanders to take decisions once made in the Situation Room. While this may be an attractive option, pursuing it would need to make up for the Obama-era rationales for micromanagement (norm setting, oversight) as well as the gaps generated by micromanagement (lack of attention to strategy and non-military tools).

Transparency is necessary to the strategy. By the end of the Obama administration, key steps had been taken to publicly acknowledge the legal and policy framework that governed the lethal drone program, to describe the decision process used to apply the program, to publicly announce basic information about some strikes, and to recognize (by the government's accounting) civilian casualties. Still, many officials argued that further transparency necessary. The Trump administration seems to be moving counterproductively backward in drone transparency measures and military operations more broadly. Enhanced secrecy impedes the public's ability to oversee basic decisions about the scope of military actions taken in their name.

Summary of Policy Recommendations

The optimism associated with applying drones and other light footprint tools is well intentioned: meet national security objectives while generating low risk to our own forces and limited harm on the societies we are working with and among. But with that should come a realistic understanding of what effects we are generating, what we are actually capable of achieving, and whether these truly are the best means of accomplishing our goals. Toward that end, the Trump administration should:

- Educate themselves on the "tooth to tail" of light footprint capabilities – drones, special operation forces, etc. – including their growth in size and scope, the employment requirements and possible tradeoffs, and any readiness challenges, in order to more proactively manage this portfolio.
- Establish public and realistic security strategies, including goals and objectives around use of force and associated security activities.
- Generate measures of effectiveness to better understand where and how light footprint capabilities such as drones are most effective and deliberate processes (e.g., table top exercises) to assess alternative strategies and required complementary non-military tools.
- Examine and rationalize intelligence consumption, including how demand impacts the scoping of the intelligence community and requirements for real-time information.
- Invest in reviewing assumptions around counterterrorism targeting, including how artificial intelligence will be integrated into this process.
- Divest from micromanagement of drone operations by making up for its rationales (absence of public oversight) as well as the gaps generated by micromanagement (lack of attention to strategy and non-military tools).
- Invest in necessary predicates to delegation of security decisions: mutually understood strategies, trust and accountability between civilian and military leaders, left-and-right limits to policy,

empowerment of lower level military and non-military national security officials, and mechanisms to raise serious concerns to senior officials.

- Reverse position discouraging updates to and constraints on Authorization for Use of Military Force.
- Launch review of non-kinetic counterterrorism tools, including legal, policy, and process barriers that unintentionally discriminate against non-kinetic approaches vs. kinetic approaches.
- Study how shifts from heavy to light footprint approaches have impacted U.S. ability to prevent and measure civilian casualties.
- Start internal and external oversight and review processes on civilian harm, how government and non-government organizations can work together in measuring it, and its impact on national security interests.
- Publicly announce current drone employment policy and reverse decisions to limit publicly available data on drone strikes and civilian casualties.

Introduction

Love them or hate them, drones have unquestionably added a new tool with which the United States can wage war, manage crises, and fight terrorism. Their specific capabilities have been extensively studied, as have the legal and policy challenges surrounding their employment, their effectiveness in a range of mission sets, the opportunities and risks associated with their potential export, and their association with civilian casualties. In the Situation Room, on the news, and in entertainment, drones are on people's minds.

The Center for a New American Security (CNAS) built this project to examine a subtler, less-explored question: whether drones have changed us – that is, whether and how drones alter policymakers' approach to crises and the use of force. Such shifts, we posited, could have significant, underappreciated implications for civilian oversight of armed conflict and for democratic control over decisions to use armed force overseas. Understanding how senior officials in the Barack Obama administration approached and learned from these matters could offer useful lessons to the Donald Trump administration.

To some extent, this question framed the issue too narrowly. Discussion about drones reflects a broader shift in the way the United States approaches national security. The debates surrounding them are a manifestation of the growing pursuit of light-footprint, vulnerability-minimizing security approaches, and an ever-improving panopticon of intelligence, surveillance, and reconnaissance (ISR) technology. While some widely discussed drone advantages and critiques are unique to the platform itself, many are not, and distinguishing appropriately is important.

Drones bring both distinctive capabilities and distinctive challenges. Their characteristics have engendered a kind of magical thinking outside government about the platform and its applications, but also, and as importantly, within government. There are enduring disagreements about drones' efficacy, how much risk they generate, how they are prioritized, and how to provide adequate oversight to them – with few or no forums for resolution. In policy development and implementation, drones and drone-related processes have become a proxy for crisis response, situational awareness, tactical oversight, ethical use of force, and responsiveness to political will on military intervention. Among critics, drones are a scapegoat for a battlefield that mixes civilians and combatants, military-technological evolutions that make warfare less personal, a population that both supports war and abhors American military casualties, and a Congress that shies away from debate on the use of force. In short, drones are an entry point for grappling with asymmetric threats and repeat crises in a democracy that is exhausted by the discussion.

For these reasons, the legacy of the Obama administration's relationship with drones, including their hard-won lessons, is worth exploring. This paper examines several facets of policymakers' relationships with drones and the decision-making process, particularly regarding the use of force. In doing so, it also considers the degree to which these dynamics are representative of a broader shift in national security policymaking. Finally, using these insights, it makes recommendations for the Trump administration.

Project Background and Methodology

This paper is the second in a CNAS series dedicated to understanding how 16 years of extensive drone use have affected the dynamics of national security decisionmaking, particularly regarding the use of force, and exploring the ways those dynamics may affect democratic accountability, congressional oversight, and democratic control over the use of force.

As the initial step of this project, the first working paper ("Weird Birds: Policymaker Perspectives on Unmanned Aerial Vehicles and their Impact on National Security Decisionmaking") used prior research on public perceptions of drones, as well as extensive structured interviews with former government officials, to explore how senior policymakers think about drones, both armed and ISR, given how integrated they are into formal policy processes, counterterrorism, and crisis response. It highlighted key issues for further study, formulated to gain feedback from a community of interested experts

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and practitioners on their merit and potential for policy, process, or legislative reform.

This paper builds on that effort, supplemented by further interviews, this time unstructured, with different senior Obama administration officials, by workshops with national security experts, and by additional research to explore key findings from the first phase and pursue recommendations for the Trump administration.

For the purposes of this project, "drones" generally refers to large, military-specific, remotely piloted aircraft capable of persistent reconnaissance and attack missions (e.g., MQ-9 Reapers); exceptions are noted. Though drones are used in many capacities far beyond the scope of this paper, interviews and workshops typically focused on the following missions: ISR (in areas of active hostilities such as Iraq and Afghanistan, in support of counterterrorism, against other asymmetric challenges, and in support of national security crises); lethal counterterrorism strikes outside areas of active hostilities; close air support for ground troops; and any combination of these. Discussion of armed drones in interviews focused generally, though not exclusively, on theaters outside major U.S. operations. Where appropriate, clarifications are noted.

"Light-footprint approaches" has no standard definition, but in this paper it is meant to portray what Jack Goldsmith and Matthew Waxman call "small-tread, clandestine, and often long-distance warfare," enabled by low-profile, low-manpower, and comparatively low-cost capabilities, and often implemented by, with, and through U.S. partners.[1] This is in contrast to the troop-intensive approaches employed in Afghanistan and Iraq during the George W. Bush and Obama administrations. Though generally associated with counterterrorism strategy, this descriptor is by no means exclusive to it; examples such as 2011 Operation Unified Protector in Libya and widespread security force assistance activities may also be considered light-footprint operations.

Interviews for both phases of the project were conducted with former senior national security officials as well as midlevel officials who personally supported senior policymakers involved in high-level national security decision processes (i.e., those at or highly involved in National Security Council deliberation, including both political appointees and career civilian officials).[2] General descriptions of policymaker views do not include military officials; though some interviewees had prior service, senior service members were not

An MQ-9 Reaper sits on the flight line at Florida's Hurlburt Field, April 24, 2014. The MQ-9 Reaper is an armed, multi-mission, medium-altitude, long-endurance remotely piloted aircraft. (John Bainter/U.S. Air Force)

interviewed (though some participated in the expert workshops). Interviewees were selected from a pool of individuals who both observed and shaped the national security debate on drones and who could describe how official views on drones evolved over time. In this paper, interviewees are anonymous. Takeaways from these interviews should not be viewed as generalizable knowledge, nor are the policymakers' views monolithic. But they offer a useful lens on the ways officials involved in establishing present norms on drones view the platform, its associated processes, and their role in addressing national security challenges.

At the time of the interviews and drafting of this report, the Trump administration had not formally released any official plans to definitively alter the Obama administration's policies and practices with regard to drones, though several indicators hinted at policy shifts commented on later in the paper.

Background and Framing

As the Atlantic Council's Aaron Stein recently commented, there has been too little introspection on the role senior policymakers have played in elevating the light-footprint approach to national security challenges, particularly but not exclusively terrorism.[3] Drones, with their operational reach and lower risk to U.S. forces, are a prominent component of this approach. They have received great attention, civilian policymaker relationships with them (and whether they matter) much less. The extent to which drones – whether as an individual platform or a symbol of current strategy – may be fundamentally reshaping senior policymakers' approach to the use of force is not well understood. Drones' unique ISR capabilities may also be changing the way civilian policymakers make decisions and interact with their military counterparts. Moreover, their low profile and light footprint may be fundamentally shifting the way Congress and the American people are able to offer oversight and democratic accountability for U.S. government actions overseas.

Over the course of the administration, the Obama national security team made a significant effort to draw down U.S. engagement in large-scale ground wars in Iraq and Afghanistan, but set legal and policy precedent easing the way for "smaller" interventions against asymmetric threats or in support of U.S. partners.[4] Drones played a key role in this approach, and Obama's National Security Council became gradually more comfortable with developing, employing, and even exporting both ISR and armed drones. As it did so, the administration also grew somewhat more transparent about its preferred norms of use for these platforms. The eventual release of the presidential policy guidance (PPG) on Procedures for Approving Direct Action Against Terrorist Targets Located Outside the United States and Areas of Active Hostilities,[5] the setting up of the legal and policy frameworks surrounding the use of force,[6] Executive Order 13732 – United States Policy on Pre- and Post-Strike Measures to Address Civilian Casualties in U.S. Operations Involving the Use of Force[7] – and the spearheading of a Joint Declaration for the Export and Subsequent Use of Armed or Strike-Enabled Unmanned Aerial Vehicles (UAVs)[8] were all belated but welcome steps along that path.

The Trump administration inherited those relatively new Obama policies regarding use and export of drones, as well as a broad array of security challenges – but little of the prior administration's familiarity and comfort with either. Incoming officials have critiqued their predecessors' tendency to control national security from the West Wing, but have only begun to wrestle with the legal and policy challenges of this new era of warfare.[9] Regarding transparency, Trump's team generally puts more weight on operational security than the public's need to know. Early administration rhetoric and actions indicate a preference for more aggressive military action.

Yet the conditions that informed the Obama administration's approach are fundamentally unchanged. The public remains skeptical of large-scale military interventions, or any efforts that generate military casualties, and Congress has made only small[10] efforts[11] to check the executive branch's war powers. Strategies that minimize the flaws and risks – and television coverage – of endless war while "doing something" in the face of asymmetric threats remain highly appealing to policymakers and to the general public. Case in point: When four U.S. soldiers were killed in a counterterrorism mission in Niger in October 2017, Congress and the public erupted in outrage over U.S. activities there. When the United States and the government of Niger agreed to deploy armed drones in the country, there was no comparable public outcry.

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Though drones have been used by the U.S. military in some form for decades, they have over the past 16 years become a major tool of U.S. foreign policy, with a range of ISR and remotely piloted persistent attack functions. With a view that the tides of war were receding[12] and a pledge to draw down America's major military operations overseas,[13] the Obama administration embraced and invested in the drone toolkit it inherited from the Bush administration. More broadly, as David Sanger has written, "drone strikes, cyberattacks and special operations raids that made use of America's technological superiority were the new, quick-and-dirty expression of military and covert power."[14] The Bureau of Investigative Journalism estimates that the Obama administration conducted roughly ten times as many drone strikes as its predecessor. Trump has, in turn, accelerated drone strikes further and has also expanded both areas of active hostilities and exceptions where lethal strikes may be employed.

Light-footprint approaches such as drone use present novel challenges for democratic oversight and accountability. As Jack Goldsmith and Matthew Waxman write, "Obama's innovations pose[d] a distinctive challenge to U.S. democracy and military strategy because light-footprint warfare does not attract nearly the same level of congressional and especially public scrutiny as do more conventional military means." Whether or not limited oversight was the intention, it is the result – and, as they note, Obama's precedents will remain in place for future presidents to make use of however they desire.[15]

Likewise, the Obama administration's assumptions may carry over to complicate understanding of objectives and their attainment. Years before he became national security advisor, H.R. McMaster warned about the attraction of presuming light-footprint capabilities and precision technologies, applied in the absence of clear strategy, can lead to "lightning victories." Such "defense theories, associated with the belief that new technology had ushered in a whole new era of war, were ... applied to the wars in Afghanistan and Iraq; in both, they clouded our understanding of the conflicts and delayed the development of effective strategies."[16]

U.S. President Donald Trump and his daughter Ivanka Trump walk toward Marine One while departing from the White House on February 1, 2017. Trump made an unnanounced trip to Dover Air Force Base in Delaware to pay his respects to Chief Special Warfare Operator William "Ryan" Owens, who was killed during a raid in Yemen. Owens was the first active-duty military service member to die in combat during Trump's presidency.
(Mark Wilson/Getty Images)

But such assessments tend to pigeonhole drone employment – and light-footprint approaches more broadly – in a negative or even nefarious light. Although drones deserve more scrutiny, they also merit fair assessment of their potential benefits when applied effectively and opportunity costs when not (whatever policymakers consider those to be). This is especially important as drones evolve from a niche platform to one more integrated into broader military capabilities.[17] Whatever approach to national security the Trump administration pursues, understanding the foundation upon which it builds its reforms – the blind spots, the lessons learned, and the good and bad habits – will be critical for policymakers.

Exploring the Relationship: Drones and Policymaking

This section examines several key aspects of both how drones affect the process by which policymakers decide to use military force and how policymakers oversee national security matters more broadly. In doing so, the section also explores how drones as a platform or concept may affect the policymaking process and the degree to which they are reflective of light-footprint capabilities overall.

Anatomy of a Drone: Continuing the Love Affair With Drones Requires Understanding Them Better.

KEY TAKEAWAYS

- Most policymakers initially underestimate drones' cost and profile and overestimate their availability, capabilities, range, and "tail" requirements.
- Over time, Obama administration counterterrorism policymakers became uniquely familiar with drone capabilities and often proprietary with drone allocation.
- U.S. counterterrorism and crisis response approaches have been built on assumptions around light footprint warfare's precise impact as well as low cost, risk, and resource demands.
- Misunderstanding or downplaying the toll of such approaches will affect policymaker calculations.

Discussions with former officials in both the first and second phases of this project elicited mixed reviews as to how well senior policymakers in the Obama administration understood drones (whether ISR or armed platforms). The question alone betrays something of what make drones unique. As one former senior official said, "There's been no platform like this before – no other platform comes close"; and its uniqueness is a large part of what prompted policymakers to try to understand and utilize it far more than any other.[18] Policymakers appreciated drones' distinct attributes (as highlighted by the Stimson Center Task Force on Drones): persistence, precision, operational reach, force protection (i.e., the ability to have a military presence in areas where one is otherwise not possible), and relatively low profile.[19]

Although Obama-era officials grew more sophisticated in their understanding of drones over time, initial assumptions were often less than accurate: Drones aren't as cheap as they thought, and we don't have as many as we'd like.[20] Over the years, counterterrorism officials especially became conversant in, for example, payloads and loiter time for both ISR and armed platforms. But at the same time, participants in the project had the view that some senior and midlevel national security officials may have lacked adequate understanding of drones' comparative advantages and end-to-end requirements (e.g., personnel, analytic capacity, upfront intelligence). Two discussions compared drones to Kleenex branding – people knew they wanted more information and simply assumed that drones would be the best way to obtain it.[21]

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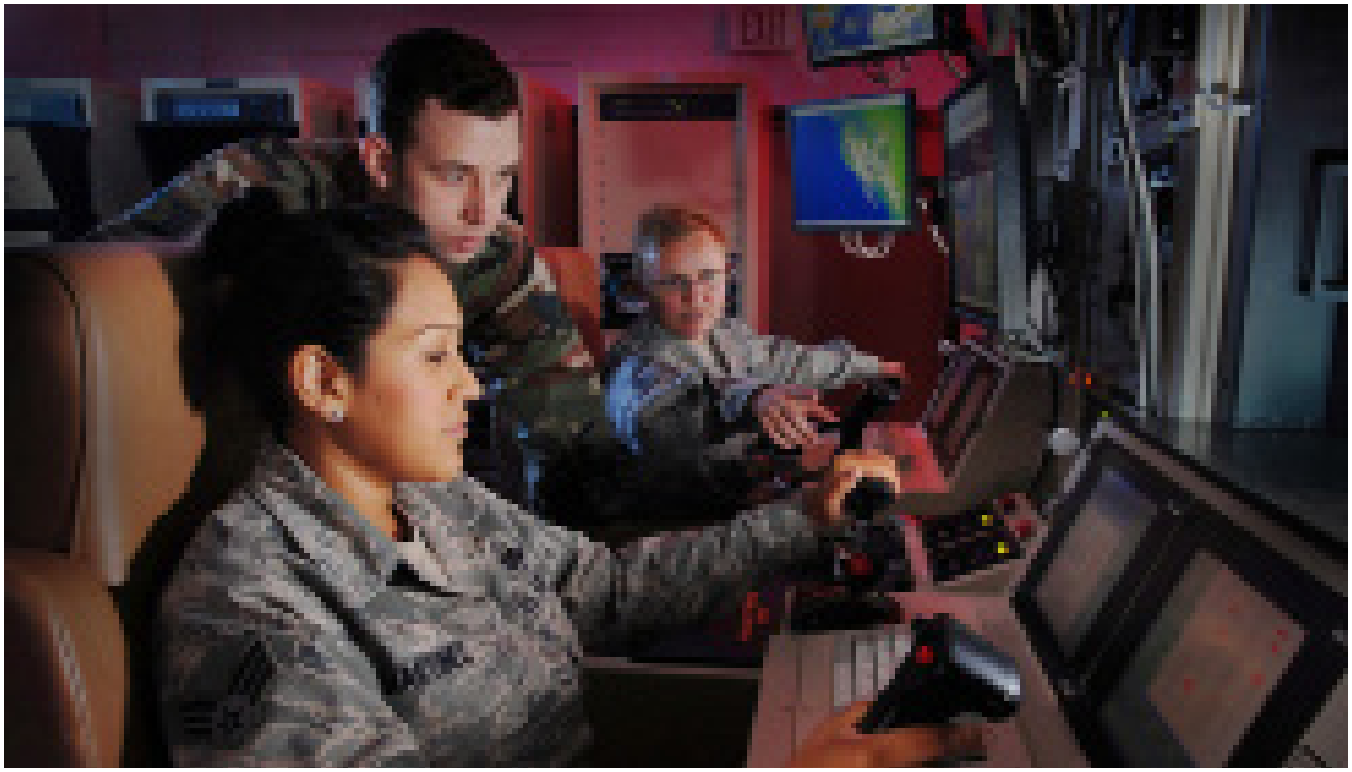
Senior policymakers usually do not need a granular understanding of the specific advantages or drawbacks of any one platform; military and intelligence officials do that. But drones are a unique case, and there was utility in policymakers' ultimately digging into the details of drones. Drones were in high demand for a range of missions getting senior policymakers' attention. And senior officials often led the charge in employing the platform in new theaters, particularly for ISR. One of the most rigorous national security processes from the Obama administration, the creation of the PPG, was partially built around determining proper employment of the platform.

The traits strongly associated with drones – unmanned, precise, low profile, low cost – all are consistent with Washington's preferences for light-footprint warfare. The problem is that this rhetoric, while accurate in a relative sense, understates both the impact and the resource demands of drone employment. Former Center for Strategic and International Studies analyst Sam Brannen explores the impact of the "drone narrative" in his 2015



U.S. Air Force MSgt Jennifer Oberg, background, a communications maintenance instructor, explains the features of a ground control station to SSgt Jason Avera, center, and SrA Raquel Martinez, foreground, during training at March Air Reserve Base, California, April 19, 2010. (Val Gempis/ U.S. Air Force)

report, concluding, "Without question, unmanned systems are different. Having a rational debate about what that difference really means requires objective understanding of the evolving technology as well as an understanding of overall U.S. military requirements to achieve national security objectives."[22] Such analysis demands dispensing with some typical drone myths. A frequent anecdote is that drone strikes may be precise, but from the ground they still look like warfare, and the United States may not get local credit for its target discrimination. A remotely piloted flight is by no means a low-manpower-demand mission; each UAV mission requires round-the-clock coverage by, at a minimum, a pilot, a sensor operator, and an intelligence analyst; teams must operate in shifts. Drone strikes for counter-terrorism purposes can take months of time, analytic capability, and other means of support before a drone is even called in.[23] A "CAP," or combat air patrol – the usual measure policymakers think about when considering drones like MQ-9s – is far more than a single aircraft, as summarized by the Center for the Study of the Drone:

> Each CAP is supposed to be staffed with enough equipment (aircraft, ground control stations, satellite communications) and personnel (drone pilots, sensor operators, maintenance crews, mission coordinators, intelligence analysts, and others) to provide 24-hour coverage for a particular geographic area. A CAP typically includes four drones and around 200 personnel.[24]

These are all obvious points for expert practitioners, but not necessarily for all policymakers, and it's useful to consider how inadvertently downplaying scale and cost of drone employment may affect policymaker calculations – and risks to the fleet and its personnel. Hugh Gusterson uses the term "drone essentialism" to highlight one of these risks: the assumption that a "drone" embodies all the characteristics ascribed to drones, despite the wide variety of platforms and circumstances. "A drone is a socio-technical ensemble," he writes, "and the same drone will be deployed to different effects in different cultural and organizational settings."[25] Ultimately, maintaining such misconceptions diminishes the effectiveness of the platform. In one official's view, "The policy mythology of 'drones' actually degraded their effectiveness and efficiency in some circumstances, with more senior experts believing their understanding was solid enough to micromanage from afar."[26]

As the Obama administration progressed, senior counterterrorism officials made concerted efforts to understand drones as a "as a military capability, including basing, overflight, political ramifications," as one former national security official shared – though this took years of experience. And even after they gained this knowledge, recent studies indicate there were serious stresses on the remotely piloted aircraft (RPA) force: lack of manning, overtasking, undertraining, and out-of-control demand.[27] Starting fresh, the Trump administration should seek a better understanding of the full burden and cost of these platforms.

Comparable questions should be raised about other light-footprint approaches that, because of their perceived low cost and low profile, also escape necessary scrutiny. For example, employment of special operations forces for missions from training and advising to raids on high-value targets has increased dramatically, both on traditional battlefields and off. President Obama grew special operations substantially and applied them broadly; the Trump administration appears to be on a similar path.[28] At the same time, a regular headline in the defense community is "special operations at a breaking point" – a finding that has done little to limit the appetite for these troops.[29] Policymakers and congressional overseers do not seem to fully grasp the risks undertaken by such forces when they deploy in austere environments, even for relatively low-risk missions.[30] Similar demand – and similar confusion – can be found in the cornucopia of building-partner-capacity authorities that have mushroomed since 9/11.

The Trump administration was dropped into the middle of several ongoing operations and inherited a number of highly effective but high-demand and high-risk tools. Understanding those tools' specific capabilities, requirements, and downsides may improve their utilization.

Need to Know: Drones Give Access to the Inaccessible. Policymakers Must Resolve If They Need It – and How Much.

KEY TAKEAWAYS

- Drones allow U.S. policymakers to monitor a situation that might otherwise be entirely off limits.
- This real-time information access has generated insatiable demand and, with it, risks.
- With this real-time access policymakers may:
  - Place greater faith in the value of real-time information than is warranted;
  - Be drawn into tactical decisions or intervention in scenarios that might not merit U.S. engagement; and
  - Can underestimate the impact of real-time demands on force structure and human capital, with expectations of certainty that are impossible or unaffordable.

Drones are part of the continued evolution of technology allowing U.S. policymakers to "be" somewhere and monitor a situation that might otherwise be entirely off limits. Getting data and insight faster than adversaries has always been a critical facet of gaining strategic advantage. But in discussions of the evolution of drone warfare with policymakers at the senior and middle levels, there was an interesting disconnect between those who were uncomfortable with the increasing reliance on such feedback (usually more junior), and those who were convinced of not only its value but also the need to build more of such platforms (usually more senior).

Three risks emerged from these discussions: First, policymakers may place greater faith in the value of real-time ISR than is warranted, given its potential for both delay and resource impacts. Drones, one respondent noted, were often treated as the easy answer to every problem. "Intelligence is imperfect, and we always want as much as possible," she said. "That's understandable, but we're getting lulled into idea that drones will provide [the answers]. [That's a] false comfort."[31] Another former defense official agreed that there is always a new situation emerging to put a drone in.[32] Also, the option to

Drones, one respondent noted, were often treated as the easy answer to every problem.

ask for more information in any context was sometimes effectively a means of putting off decisions or action.[33] One military official warned against this tendency, commenting, "Strategic leaders, by gaining real-time information, trick themselves into thinking they're gaining real-time intelligence. Thus, because all people desire to know, the demand signal goes up, we generate more crews and airplanes, we meet the demand, and we do all of it without generating any additional no-kidding intelligence at the strategic level."[34]

Second, the steady diet of requests for information may divert senior officials from strategic responsibilities, drawing them into tactical decisions or intervention in scenarios that might not merit U.S. engagement.[35] Several respondents recalled atypical requests (not necessarily fulfilled) for drones by senior policymakers. What many had in common was lack of clear connection to national security priorities or threats – for example, the highly publicized searches for Joseph Kony in Uganda and the kidnapped "Chibok girls" in Nigeria, and even a request to surveil potential poachers – and some requests concerned missions for which drones were simply not suited.

But there's an alternate view: Why not acknowledge the enormous utility of drones for all kinds of intel-scarce scenarios and produce many more of them? Demand for drones is infinite, for operators in war zones, targeters, and senior policy officials – and all for different reasons. It's hard to justify not having more, a few former officials commented, for embassy security matters, for hostage rescue scenarios, or for any situation where on the ground intelligence isn't readily available and more information at low risk would make a crucial difference.[36]

The third risk is whether policymakers grasp the impact their demands for more real-time access have on force structure and human capital. For a number of reasons, the Department of Defense was for years resistant to fulfilling such demands with either more unmanned airframes or necessary personnel, but has now begun to invest seriously in both. Whether the initial caution was warranted, it's worth considering the impact this move has had and will have on force structure and the intelligence community. Drone spending in the defense budget is set to reach a five-year high in fiscal year 2018.[37] Already, the MQ-1/9 community has more pilot billets than any other aircraft in the Air Force.[38] Currently, the service is pursuing a "get-well plan" to

An MQ-1B Predator, left, and an MQ-9 Reaper taxi to the runway in preparation for takeoff June 13, 2014, on Creech Air Force Base, Nevada. The aircraft are assigned to the 432nd Wing, which trains pilots, sensor operators, and other remotely piloted aircraft crewmembers. (Christian Clausen/U.S. Air Force)

make up a gap in pilots that it has, in some circumstances, turned to contractors to fill.[39]

The intelligence community faces similar challenges, with "targeting" becoming a growing focus and a realization that it is impractical for analysts to review all the content collected by drones in the last several years (and if they did so, at what opportunity costs?).[40] One recent report commented, "In 2011 alone, the US Air Force amassed over 325,000 hours of drone video—that's about 37 years of video gathered by one military service in one calendar year, and that was six years ago." Much of this footage is useless, and the total is far too much to reasonably review – and the problem will only grow in scope as policymakers grow accustomed to real time responsiveness.[41] New investments in artificial intelligence are projected to make headway against managing this backlog, but serious caution will need to be taken in determining what it can and cannot make a judgment on. With the United States falling behind in other key intelligence enablers, such as its satellite architecture, it's worth asking how multiple demands should be prioritized.

They have grown so used to such information abundance in some theaters that, as one workshop participant noted, there "is an expectation for certainty that is impossible or at least unaffordable."

Policymaker demands for more intelligence – and the associated data overload – are emblematic of a time when senior policymakers have few tools or protocols to manage information. As international communications have improved, many former officials have talked of their overflowing inboxes and the parallel expectation that they master it all: "hundreds of diplomatic cables, finished intelligence assessments, unfinished raw intelligence, and other types of information (e.g., news reports and even social media)" come in on a daily basis.[42] They have grown so used to such information abundance in some theaters that, as one workshop participant noted, there "is an expectation for certainty that is impossible or at least unaffordable."[43] Neither demand nor supply is going away, so a broader strategic conversation on managing what policymakers "need to know" is vital.

Allocation and Efficacy: Policymakers Should Explore How Drones Are Employed and Better Understand Where They're Most Effective.

KEY TAKEAWAYS

- Policymakers' biggest frustrations with drones were lack of supply and, with it, how best to allocate drones against a range of security challenges.
- As a result, policymakers uniquely intervened in how and where drones were used.
- Demand rather than effectiveness and appropriateness often set the pace for drone allocation under tha Obama administration.
- Assessment of where and under what circumstances drones are most effective is inconclusive.

Related to concerns about demand and capacity are the misgivings of several policymakers in this study about how drone platforms are allocated among different theaters and mission sets around the globe. This concern was, in one form or another, one of the most frequently raised issues in the first phase of this project. Some officials were not satisfied with the way allocation discussions were framed, and there were never enough drones available to divert to a new crisis without the potential for increasing risk in some other area of operations.

Boiling down this concern comes down to two issues: in which circumstances drones are most effective and whether they are allocated in line with national security priorities. If an infinite supply of drones were available, these questions would be less important. But when asked about policymakers' biggest frustration with drones, interviewees brought up the fact that there "aren't enough" repeatedly.

Drone effectiveness is less clear than it would seem, Osama bin Laden's notorious views aside. With the tremendous clamor for drones over the past two decades, demand has set the pace for employment of these platforms as much as anything else. [44] But given the constraints on airframes, personnel, and associated resources, discussion of where an MQ-9 or comparable system can be most effective is not idle. The relative efficacy of drones for widespread operational overwatch versus counterterror strikes in isolated theaters versus surveillance in an embassy security situation versus support for a partner facing a security challenge has not always been obvious to policymakers.

Nor is external research on where and how drones are best deployed conclusive. There is an extensive body of analysis on the effectiveness of drones, typically for counterterrorism[45] or counterinsurgency[46] purposes specifically, though more forward-looking analysis considers other manned-unmanned teaming missions. Much of the research focused on current challenges seeks either further data[47] or better measures of effectiveness (i.e., a strategy against which to measure this tactic). Within government, there may be useful pockets of sensitive analysis that would enable discussions toward this end, but this work either has not reached a level to inform all necessary senior officials or requires further investment.[48] Regardless, more widely accepted data gathering and measures of effectiveness for drones need to be developed.

All that said, it's usually not normal for strategic-level policymakers to believe they have to intervene in decisions about how to move assets at the tactical level, yet this happened with drones in the prior administration. Generally such decisions are the result of relevant agencies implementing strategic-level guidance – for example, the National Intelligence Priorities Framework, which outlines "priorities for national intelligence support" as set at the presidential/national security advisor level and informs "the allocation of collection and analytic resources."[49] Similarly, the Department of Defense Global Force Management process provides a role for the president (and advisors) to give guidance

But even if the Trump administration moves away from such tight controls, it would do well to consider why the prior NSC saw such intervention as necessary.

on force assignment and force allocation at the strategic level, via the Unified Command Plan and National Security Strategy.[50] By-exception requests for forces or capabilities are typically managed by agencies, and not always at the cabinet level.

That Obama officials occasionally weighed in on drone allocation could be dismissed as another example of micromanagement. But even if the Trump administration moves away from such tight controls, it would do well to consider why the prior NSC saw such intervention as necessary. If there was discomfort among senior leaders in the Obama Administration on the connection between their strategic guidance and implementation, understanding that gap is crucial. If there is a real divergence between senior officials and the military services on the need to invest in capacity to meet demand in unmanned platforms, managing this demand is necessary. For any serious examination of where and how such platforms are making a measurable difference to be useful, each of these problems will need to be resolved.

Throughout the Obama administration, there were several initiatives intended to contribute to a more effective allocation of the drone fleet that would also be better aligned with the administration's policy priorities. In the course of reviewing these matters, the administration looked at where to invest in the program in order to increase capacity, determined where further interagency coordination might lead to more effective and policy-aligned allocation of resources, and identified bureaucratic roadblocks to such coordination.[51] However, there was some trepidation among senior officials as to whether drones were important enough to merit the "10000-mile screwdriver" of Washington to allocate them. With all the attention on the platform, there were also questions of whether there were instead longer-term and more strategic intelligence investments that merited greater attention or whether the proper solution would be to meet infinite demand with far larger supply. It is not clear whether the Trump administration is also considering such matters. However, particularly given that the Trump administration seems far more comfortable delegating all operational matters to the Department of Defense, it should pursue deeper consideration of this work.

But other light-footprint approaches deserve similar attention. As previously mentioned, demand for special operations forces, in both advisory and direct action capacities, is increasing, as is the demand for security force assistance capacity and funding.[52] These toolkits are a godsend for policymakers seeking "cheaper" and easier means of addressing lesser security challenges in situations where the United States has limited political will or interest to engage in such high-cost ventures as significant ground troop deployment. But besides high demand, these light-footprint activities have other elements in common: lack of consensus on their long-term effectiveness,[53] weakness when disassociated from strategy,[54] and the creation of tension with the diplomatic community on oversight and linkage to broader foreign policy goals. That they are viewed as lower-cost and lower-risk may lessen the pressure on policymakers to engage on their long-term effectiveness and second- and third-order effects.

Propensity for Use of Force: Drones Create Options – But Policymakers Need to Evaluate Them.

KEY TAKEAWAYS

- Lowering the barriers for use of force is both a feature and a bug for drones.
- Some policymakers argued drones are simply part of a continuum of military techno-evolutions to "project power without projecting vulnerability" - itself responsive to public demands. But drones are unique in their ability to pair persistent ISR and kinetic capabilities into one package without risk to U.S. forces.
- This package of traits and the comparative secrecy of many drone activities also result in lower public and congressional scrutiny, and limits the feedback loop to policymakers.
- Obama officials were concerned enough about the risk that drones would lower the threshold for kinetic action to require dedicated senior policymaker oversight.
- But sequential administrations have made it increasingly easy to pursue use of force with limited congressional check.
- Legal and policy barriers often privilege "easy" kinetic actions at the expense of "harder" non-kinetic ones.

A key question of this project was what impact drones have on policymakers' threshold for use of force. This is a complex matter about which a great many theories have been offered. In his study on whether drones, in reducing the costs of conflict, encourage war, James Walsh notes: "Commentators on both sides of the debate over drone use have reflected on this question and given reasons for thinking that drones may lower civilians' inhibitions against fighting, raise new ones, or fail to significantly alter them in one way or another."

In terms of the evolution of military capabilities, the objective (and trend) is always to make it easier, cheaper, and less risky to inflict pain on adversaries. Drones are simply part of a continuum of efforts to "project power without projecting vulnerability" – that is, without risk to American forces. To the extent that analysts are concerned that drones make it simpler to use force, such debates are not new, having been held for decades about everything from bombers to cruise missiles.

President Barack Obama delivers a speech on counterterrorism strategy at National Defense University on May 23, 2013. (Pete Souza/White House)

At the same time, drones are unique in their ability to pair persistent ISR and kinetic capabilities into one package without risk to U.S. forces. This very facet has provided them with both increased precision in identifying targets and increased external scrutiny. Some analysts[55] have discussed lethal drones in the context of a moral imperative to use such a capability to the utmost, given their more "humanitarian" profile: lower risk to military personnel, lower risk to civilians, lower cost compared with other kinetic actions. But drones also bring the risk of moral hazard written about by Micah Zenko and Sarah Kreps (summarized by Steve Coll): "drones may spare more innocents but they may also create more war."[56] These same traits and the comparative secrecy of many drone strikes also result in lower public and congressional scrutiny, limiting what might otherwise act as a brake on the application of drones in kinetic operations. That drones frequently operate in theaters with no or limited U.S. presence on the ground also limits the feedback loop to policymakers on the effects – positive or negative – of drone employment.

How policymakers themselves consider the question of whether drones lower the threshold for use of force is neither straightforward nor easily measured. Obama administration policymakers in this study did not decisively weigh in on the matter. But from their statements and actions, it's clear some were worried enough about such a risk – or even the perception of such a risk – to develop policies and practices to manage it.

Drones offered options for policymakers to study or intervene against threats where previously there had been no options, or none at a cost they felt comfortable with.

Study participants noted that drones offered options for policymakers to study or intervene against threats where previously there had been no options, or none at a cost they felt comfortable with. With the Obama administration intent on drawing down the scale of U.S. overseas military commitments, drones (and other light-footprint options) were a welcome alternative – partially "solving" the American people's distaste for large, higher-risk, long-term kinetic operations.[57] Analysis by CNAS-affiliated researchers Julia M. MacDonald and Jacquelyn G. Schneider showed that "risk-averse" leaders (as they categorized Obama) have an affinity for drones "while those more tolerant of risk preferred conventional, manned options."[58] In other words, drones are both viewed as responsive to public concerns about America's long wars and appealing to leaders in search of means to responsibly study and address asymmetric threats.

However, there was a recognition among some respondents that the option of employing drones has the potential to distance policymakers from the effects of war, as former Assistant to the President for Homeland Security and Counterterrorism Lisa Monaco stated in a podcast interview last year.[59] President Obama himself, in announcing his administration's drone policy, warned against the potential for the platform to be abused due to this remote operation and secrecy. "The very precision of drone strikes and the necessary secrecy often involved in such actions can end up shielding our government from the public scrutiny that a troop deployment invites," he said. "It can also lead a President and his team to view drone strikes as a cure-all for terrorism."[60]

The results of such mindfulness are evident in the development and implementation of Obama's 2013 PPG.[61] As former counterterrorism official Luke Hartig describes, the PPG is "a dry foray into the gears of government, law, and operational procedures. ... The PPG... runs 18 pages and contains eight sections that lay out in meticulous detail the standards for the use of force, as well as the bureaucratic processes for approving direct action."[62]

Policymakers involved in the PPG's development and implementation demonstrate a pride in its highly rigorous and intensive nature – one of the most, if not the most, detailed and involved processes utilized in the Obama National Security Council. One respondent called its implementation "a very moral conversation."[63] Others highlighted the way the strict attention paid to considerations of use of force in this context stood in contrast to comparable debate around active conflicts in Afghanistan or Iraq; "civilians have never dug in higher with use of force than they have with drones."[64] Some pointed out the care that was taken to avoid managing this process by rote, noting that the participants applied real facts to circumstances.[65] With the requirement to develop country plans before embarking on drone operations in a given country, this was at least as rigorous a strategic planning process as any found elsewhere in the U.S. national security world.

Obama officials who contributed to this project view this extensive oversight as appropriate for the use of force outside typical war zones, particularly when the United States is engaging in use of force for the first time in a foreign country. Such operations frequently rely in the use of drones. One commented it was obligation to add legitimacy to the process, even if drones are only perceived to lower the threshold for force.[66] Others pointed to the PPG's stringent legal review requirement and its requirements that the target present a continuing and imminent threat and that there be near certainty of no civilian casualties. These conditions, they argued, acted as a "leveler," moderating any potential that drones' unique characteristics might encourage greater use of force.[67] In short: many officials seemed moderately satisfied that they had been able, through process and judgment, to apply a limit on the risk that drones would lower the threshold for kinetic action.

Many officials seemed moderately satisfied that they had been able, through process and judgment, to apply a limit on the risk that drones would lower the threshold for kinetic action.

But even this approach to controlling drone usage has limitations. First, it supplanted traditional forms of kinetic oversight – Congress, public debate – with secret oversight by senior officials who would transition out

following the next election. Even if this kind of oversight is rigorous and thoughtful, the public must take it on faith, and the cadre of officials involved will shift with each election. Second, it placed civilian officials – particularly lawyers – in the uncomfortable position of arbitrating use of force in ways not typically associated with legal review. (One respondent commented on something of a Jack Ryan effect: the allure for civilian lawyers of being asked to make operational-level judgments.)[68] Third, it may have created a time-intensive system that, while properly encouraging granular oversight of binary strike/don't strike and target/don't target choices, did not easily pose alternatives to target identification and strikes. And fourth, as one respondent noted, by framing these questions as legal ones (or to be arbitrated by lawyers), it created the possibility that policymakers might tend to turn to legal analysis first and judgment second.[69]

Options – the creation of them, the absence of them, and the evaluation of them – are at the heart of drones' appeal and risk, even with the oversight provided by the Obama administration. As one official commented, drones lower the cost of doing business in new theaters of operation, offer a new range of options for policymakers where there otherwise would not be any, and made hard conversations about how to address potential threats much easier.[70] The existence of such options should give rise to important questions about the wisdom of the approaches they enable and whether associated processes are properly set up to assess those questions.

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Other respondents turned the matter of options on its head, noting the bureaucratic incentives at play to generate potential targets and utilize lethal drones, even within the legal and policy bounds of the Obama administration's restrictive PPG. "Drones can be like sugar," one interviewee said. "You get used to the fast calories but aren't fixing the larger problem of terrorist threats."[71] Others took the argument further, hoping for future policymakers to consider the effectiveness of drones and evaluate scenarios where drones might be applied differently. Asked what he desired policymakers not include in their discussion of drones, one former official commented that he wished drones were "not viewed as a way to use force when you might not otherwise do so if risk was greater. Without drones we might not undertake a mission; with drones there is a sense we can do it."[72] Even those respondents generally positive on drones' utility were more skeptical when asked to generate questions for other policymakers. "How would your objective change if drones were not an option? Would you have the same goals? Would you use other instruments?" one asked. And, most cynically, "Would you do it all again? Do you wish these were ever invented?"

"How would your objective change if drones were not an option? Would you have the same goals? Would you use other instruments?" one respondent asked.

The question of how national security options are posed and weighted is not new, and officials across many administrations have been aware of the problems associated with leaning on easily generated military options in the face of complex security challenges. Most National Security Councils struggle to establish mechanisms that fairly evaluate how kinetic versus nonkinetic options are evaluated, how long-term strategies versus short-term risks are teed up, and how all elements of national security are balanced against one another when the Department of Defense has the greatest resources, reach, and speed. Even with the strictures imposed by the PPG or any successor, policymakers have to grapple with possible bias toward short-term action. And without the perceived higher cost, higher risk, and higher political scrutiny of conventional military options, drones have the potential to strip away much of the caution that might otherwise be applied. The Trump administration, as it revises and implements its national security decision process, should consider these matters.

Moreover, the United States has, over the past two decades, made it increasingly easy to pursue use of force – or close proxies, such as "assist and accompany" missions – by any means in a number of contexts, with limited congressional check. A recent congressional hearing on the 2001 Authorization for Use of Military Force, which authorizes war against al Qaeda and affiliates, made clear that the Trump administration sees few, if any, regional, organizational, or temporal limits on its ability to pursue terrorist threats globally.[73] Sequential administrations have made the case that lowering these

barriers is a necessary step in addressing an increasingly widespread, networked series of threats from extremist organizations. While their understanding of the threat may be accurate, both this administration and Congress should give due attention to the sorts of options they have made "easy" and whether such options privilege tactical actions that generate longer-term risk and costs. It's also worth considering whether there are other options that should likewise be made "easy."

As with drones, there is a broader question as to whether light-footprint warfare in general, which is perceived to be low cost and low commitment, is as cost free as policymakers imagine. In a "standard" debate on military options, the president and national security team would identify clear strategic guidance and objectives, and the Department of Defense would present robust courses of action aimed toward those ends as well as the "understanding of the risks, costs, and likely outcome of a military intervention" the president and advisors need to make a decision.[74] Lowering the perceived cost on the U.S. side, some interviewees posited, lowers the expectation to fully engage in this debate writ large – and changes the nature of the typical use-of-force principal -agent process. Most concerning, it could diminish the need to take stock of success or failure. Clearer understanding of the costs of light-footprint warfare at the senior policymaker level is necessary.

Certainly the wish to risk as little American blood and treasure as possible against security threats is admirable, but if costs and outcomes are being poorly measured, overapplication of such tools as drones is possible. "Light footprint" tends to mean a total lack of infrastructure to aid U.S. forces who are on the ground (such as special operations forces) should they get in trouble – a generally unexplored risk.[76] Lisa Monaco mentions the risk of impersonalizing war to the point that we don't understand the risks of second- and third-order effects. Retired general Stanley McChrystal and many others have spoken of the "resentment created by American use of unmanned strikes … which is much greater than the average American appreciates."[77] As McMaster himself warned in 2013, "concepts that rely only on those technologies, including precision strikes, raids or other means of targeting enemies, confuse military activity with progress toward larger wartime goals."[78] Policymakers owe it to themselves to explore these matters.

Airmen assigned to the 724th Expeditionary Air Base Squadron and soldiers assigned to the 411th Military Police Company take down tents from the old base to move to a new location on Air Base 201, Agadez, Niger, September 11, 2017. The United States built a temporary base at this location for ISR assets.[75]
(Joshua R. M. Dewberry/U.S. Air Force)

Precision and Civilian Casualties: Policymakers Believe Drones Can Be Precise. That May Not Be Enough.

KEY TAKEAWAYS

- Officials in this study believed drone strikes are precise, but still worried about the potential for civilian casualties - and as the U.S. footprint has evolved, so have the approaches U.S. forces can use prevent and measure civilian harm.
- Most policymakers believed they'd made serious efforts to prevent civilian casualties to the greatest extent possible and to learn from mistakes.
- Policymaker concerns were due less to imprecision of strikes and more due to foundational analysis and process. Specifically:
  - How closely civilian policymakers are involved in the definition of targets and review of intelligence;
  - How constrained policymakers have been over time from discussing drone strikes publicly; and
  - How disconnected policymakers are from the aftermath of such strikes.
- Outside analysts are worried that the government is making bad assumptions about the viability of preventing and measuring civilian casualties with theaters with limited U.S. assets – overhead surveillance and variable partner forces are simply no match for U.S. ground forces for ground truth.

Americans are, generally, positive about drones as a platform – which is a strange measure to have at all but indicative of the degree to which drones have captured public imagination. That drones are frequently described as precise instruments of warfare, carrying out surgical strikes while reducing risks to American forces, is an element of this approval and fascination. That the Obama-era policy on strikes outside the area of active hostilities required "near-certainty" – the highest possible standard – that no civilians were in the vicinity lends the platform a sense of righteousness. But with such standards come high expectations. Sarah Kreps, in one of her studies on public opinion and drones, found: "Domestic U.S. public support for lethal drone operations is high, but that support declines greatly when individuals are informed of civilian casualties."[79] James Igoe Walsh, in another survey experiment, noted that calling out the precision capabilities of such weaponry actually makes people more sensitive to civilian harm.[80]

That drones are frequently described as precise instruments of warfare, carrying out surgical strikes while reducing risks to American forces, is an element of this approval and fascination.

Lofty rhetoric – for years backed by little official data – may have given the American people high and not necessarily substantiated expectations of drone platforms as a more "humanitarian" approach to countering national security threats. Indeed, MacDonald and Schneider found gaps in understanding of drones' true capabilities in another survey.[81] In contrast, many advocacy groups have worked tirelessly to document their sense of noncombatants killed on acknowledged and unacknowledged battlefields – assessments that, in their view, stood in contrast to formal government views on drone precision, even as lethal strikes became more public in the latter half of the Obama administration.

That limited public data and lack of informed debate may have skewed public views of drones more positively is plausible. But a key question of this study is what policymakers' own views of drones – particularly as they relate to civilian casualties – reflect, and how those views affect policymaking. Unquestionably, for many years policymakers had access to better data on drone strikes and drone platform capabilities that the public did. But that there was no simple way to evaluate the data or constructively challenge it was limiting, both for how policymakers viewed it themselves and how they viewed critics.

A clear takeaway from the interviews conducted in the course of this study is that most Obama administration policymakers did worry, a great deal, about the potential for civilian casualties via drones (or any other kinetic capability). They believed that the policies and practices they shaped were serious efforts to prevent or limit civilian casualties to the greatest extent possible,

They believed that the policies and practices they shaped were serious efforts to prevent or limit civilian casualties to the greatest extent possible, and on the occasions casualties did occur, they made efforts to learn from mistakes.

and on the occasions casualties did occur, they made efforts to learn from mistakes. To be clear, their worries were not due to drones' propensity for "causing" civilian casualties. There was a general sense among respondents that drone capabilities such as persistence, advanced sensors, and munitions give them unique strengths, that these capabilities were improving over time, and when that when employed correctly drones affect civilians at no higher a rate, and almost certainly at a lower rate, than other common means of warfare. Policymakers are not alone in this belief. The Stimson Center notes in the report of its Task Force on U.S. Drone Policy, regarding the end of the Obama administration, "The frequency and number of civilian casualties resulting from US drone strikes also appear to have dropped sharply in recent years, as UAV technologies have improved and targeting rules have been tightened."[82] Generally, former officials who discussed it believed the U.S. government had a better story to tell than allegations of systemic underreporting of civilian casualties or overestimating of precision strike capabilities would imply.[83]

The Obama administration codified these views with its issuance of the executive order on civilian casualties.[84] The policy generally served as a means to set on paper practices the administration was already pursuing, but it also required a "Report on Strikes Undertaken by the U.S. Government Against Terrorist Targets Outside Areas of Active Hostilities." This was an important signal on the seriousness of the matter to that administration. The Trump administration is now required by Congress to publish a similar report.

However, some respondents expressed greater worry around three related matters that have less to do with the precision of drones' capability and more to do with the precision of the analysis that supports drone operations: first, how closely civilian policymakers are sometimes involved in the review of intelligence that identifies targets and clears drone strikes, including what constitutes a continuing imminent threat (while potentially a positive in terms of their attention, also possibly a negative in terms of division of labor and setting clear standards).; second, how unfortunately constrained policymakers have been over time in discussing drone strikes publicly; and third, how disconnected policymakers necessarily are from the aftermath of such strikes, particularly outside the areas of hostilities.[85] Policymakers want to understand more about drone strikes, how they are perceived, and their effects, but current practices limit their capacity to do so. Changing this dynamic would require shifting priorities.

Without naming them specifically, McMaster referred to such concerns in stressing the relevance of the human factor of current American conflicts in his 2013 essay on "easy war."[86] The concerns also underscore the importance of the underlying intelligence and analytic methods that enable the lethal drone program and review its effects. According to both this project's interviews and public reporting, policymakers clearly understood that the drone program was only as good as the intelligence that supported it. And during its time in Iraq and Afghanistan, the United States learned many hard-won lessons on what is necessary to protect and support populations that are not easily divided from adversaries.

U.S. President Barack Obama makes a statement in the James S. Brady Briefing Room at the White House April 23, 2015. President Obama talked about a U.S. drone strike that targeted a suspected al Qaeda compound in Pakistan but inadvertently killed an American and an Italian being held hostage by the group.
(Mark Wilson/Getty Images)

But some analysts are worried that because of time, rotation, and clear bias against boots on the ground, the government has unlearned lessons and drifted away from best practices in protecting civilians, and as a result may settle for less when engaging in light-footprint warfare. "Intelligence" one respondent said, "is a demand-driven enterprise; ask better questions and you get better answers."[87] And with a smaller presence on the ground, the basis for better questions is limited. Moreover, the "cult of secrecy" around drones, as one respondent put it,[88] and disagreements on governmental and non-governmental after-action analysis, may have stunted a necessary public discussion on the realities of how light-footprint warfare is constrained in its discernment and effects. To the extent that such discussion is ongoing, it is both limited and, often, adversarial.

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Consequently, there may be a substantial divide in the ways policymakers, the military, and the public think about the impact and cost of drone operations, and the reality on the ground. Air Force officers Colonel Mike Pietrucha and Major Mike Benitez have written eloquently around the dangers of magical thinking around "precise" application of airpower:

> Unrealistic expectations surrounding the application of force are making the strategic utility of precision far less than it ought to be – ultimately hindering both strategy and operational utility of the U.S. military. The ubiquitous nature of precision has resulted in the growth of a generation of policymakers who misunderstand the nature of warfare. ... The allure of precision weapons has proven too much for policymakers. They have been seduced into believing that somehow, aerial warfare is not the dirty, dangerous, and destructive child of modern warfare that it actually is.[89]

This may be an overstatement, but it is a useful warning about how senior officials discuss warfare in public, how Americans hear them, and potential gaps in their perceptions. Whether or not policymakers view light-footprint warfare as so clean and constrained in nature, they certainly discuss it that way. John Brennan, former director of the CIA, applied such language: "We're trying to be as careful as a surgeon's scalpel in terms of taking out the cancer of these terrorist organizations. We have to make sure, though, that we're not going to damage the surrounding tissue."[90] Though standards are different there, senior officials in both the current administration and the previous one have called the air campaign against the Islamic State in Iraq and Syria "the most precise in history" – and they mean it.[91] When military officials have been asked about what appeared to be increasing civilian casualties in the fight for Mosul and Raqqa, they have seemed confident that their measures were appropriate. "Civilian casualties are a fact of life in this sort of situation. ... We do everything humanly possible consistent with military necessity, taking many chances to avoid civilian casualties at all costs," Secretary of Defense James Mattis commented last spring.[92] Lieutenant General Steve Townsend has been particularly emphatic that coalition forces are highly restrained, accusing human rights organizations of supporting policies (like operational pauses) that would encourage ISIS's use of human shields.[93]

But the U.S. government is more – or at least differently – constrained in its ability to glean intelligence to identify targets and actually conduct post-strike battle damage assessments, particularly as compared with what it might have done in prior years in Iraq and Afghanistan. The "by, with, and through" approach puts these burdens largely on partner forces or air-based ISR. With fewer or in some cases no ground groups available to conduct investigations – or with such missions being lower priority than counterterrorism missions – policymakers are comparatively limited in how they can confront the ramifications of drone strikes. Nor are nongovernmental organizations (NGOs) or media with greater on-the-ground access always trusted source for credible reports of civilian harm, and no agreed-on methodology exists among government and nongovernment stakeholders to bridge the gaps in their assessments.

As a result, some policymakers interviewed for this study were frustrated by the ongoing back and forth between the military and the NGO community, believing NGOs to be critical partners and that "we have a better story than people are imputing to us"[94] but are poorly

suited to telling it. Still, credible external reports, such as the recent New York Times investigation "The Uncounted," have contradicted this narrative, criticizing how the U.S. selects targets, how precise its weapons actually are, how it assesses accusations of civilians casualties, and how it engages known victims.[95] Furthermore, a great deal of work has been conducted in this regard by the Bureau of Investigative Journalism, the New America Foundation, FDD's Long War Journal, Airwars, and others, to catalog strikes and account for affected civilians using their own methodologies, which the U.S. government disputes.[96] The resulting lack of trust between such organizations and the government makes it challenging to engage on matters of civilian harm in a healthy way.

Clearly, policymakers, military officials, and civil society groups are not approaching the matter of precision and civilian casualties in the same way. It's reasonable to give the Defense Department credit that its operations are precise by comparison with historical examples, and the department does take more measures than any allies or partners to protect against civilian harm. But it also seems reasonable to theorize that even if the government and human rights groups agreed on the size of the impact of air strikes on civilians on a given battlefield, as well as the capabilities of precision weaponry, they would still disagree on the nature of harm to civilians and its effect on U.S. national security interests. That the United States is far ahead of others in caring about civilian harm does not exempt it from examining its own assumptions about how to measure and evaluate it. Presently, the government does not demonstrably take into account drone blowback that "can anger whole communities, increase anti-US sentiment and become a potent recruiting tool for terrorist organizations."[97] Nor does it publicly measure the fear of those who aren't targeted, the physical impact of munitions on communities even when the right targets are hit, or the international perceptions of drone strikes as excessive. And even where it does measure harms to noncombatants, increasingly, it is slow, if not at a standstill, in processing grievance payments.[98] The human factor is missing.

There should be no surprise that, after nearly two decades of ground-troop-intensive warfare, the evolution to light-footprint approaches would require a reset on U.S. approaches to civilian harm. Such a reset demands refinement to both tactical approaches and strategic understanding. Lessons on civilian harm learned well in earlier stages in Afghanistan need to be revisited

That the United States is far ahead of others in caring about civilian harm does not exempt it from examining its own assumptions about how to measure and evaluate it.

and refined for air-centric approaches. For example, Rogers, Reid, and Kolenda,'s report "The Strategic Costs of Civilian Harm" highlights a study by Dr. Larry Lewis finding that

> air [battle damage assessments] can have substantial blind spots, particularly in the absence of other sources of intelligence and on-the-ground information, and may not be reliable on their own as a means of assessing civilian harm. According to one study in Afghanistan, initial air BDAs failed to identify civilian casualties in 19 *out of* 21 [italics in the original] cases subsequently confirmed by ground force investigations.[99]

If the United States is unable to deploy necessary ground troops to make up that difference, it should be willing to consider alternate means to both enhance the legitimacy of target selection and measure and respond to civilian harm. Starting that conversation does not minimize the significant efforts already undertaken by the U.S. government to protect civilians; rather, it recognizes the changing nature of the battlefield. But more broadly, as Rogers et al. note, senior policymakers must grapple with the fact that in these irregular conflicts, "civilian harm, even in accordance with [the Law of Armed Conflict], [italics in the original] can cause irreversible damage to a U.S. mission – a serious risk that also applies to U.S. counter-terrorism operations and partnerships with foreign security forces."[100] It is here that senior policymakers and military officials must both internally and externally get into the weeds of definitional and risk debates in a way that will almost certainly be uncomfortable – but fruitful. Detailed discussions on assumptions around target identification, measures of civilian harm, and grievance payments, and how these have evolved, are a worthwhile endeavor, even if they generate civil-military tensions. Senior officials also need to dedicate time to understanding the strategic consequences of civilian harm and addressing the gap between the way the U.S. government portrays its efforts to protect noncombatants and the way they are perceived by key stakeholders.

Micromanagement: Drones Encourage Micromanagement. That's Not as Bad as – and Far Worse Than – It Sounds.

KEY TAKEAWAYS

- Drones both enable micromanagement and are themselves ripe for micromanaging - a practice that emphasizes the tactical over the strategic. But this intensive oversight under Obama had thoughtful rationales.
- Many officials viewed micromanagement of drones as a necessary evil for establishing norms and as an alternative to external transparency and oversight.
- This oversight took enormous amounts of time, allowing less bandwidth for more strategic debate and putting emphasis on direct action against high value targets.
- The Trump administration is moving away from micromanagement of military operations, allowing lower level commanders to take decisions once made in the Situation Room.
- While delegation may be an attractive option, pursuing it would need to make up for the Obama-era rationales for micromanagement (norm setting, oversight) as well as the gaps generated by micromanagement (lack of attention to strategy and non-military tools).

The Obama administration's inclination to micromanage execution of national security policy, particularly military operations, was one of its most frequently critiqued flaws.[101] Cast as a distrust of executing agencies – particularly the Department of Defense – micromanagement was for a time the worst accusation one could level against the Obama White House, associated with "tying the military's hands,"[102] "second guessing commanders,"[103] politicizing national security, and so on.

However, micromanagement is neither isolated to the Obama administration nor a wholly negative approach. As civil-military relations scholar Alice Hunt Friend writes, micromanagement is a natural outgrowth of the increasingly complex national security challenges and toolkits of today:

> Military operations suffer from an especially acute case of politicians' execution anxiety because when military missions fail, the political and diplomatic consequences can be severe. Additionally, operating outside declared war zones imposes a far greater number of legal, political, and diplomatic constraints on military activities because U.S. forces are operating on the sovereign territory of a country with which we are not at war. ... Comprehensive engagement coordinated through the National Security Council (NSC) can facilitate operations and prevent setbacks from becoming crises.[104]

Improvements in technology and networked connectivity have enabled greater ties between Washington and those executing its policy. Simultaneously, social media and 24-hour news result in few events' remaining secret or low impact for any length of time. For all these reasons, an ongoing reset of strategic oversight versus tactical execution is to be expected.

With their ability to offer access to real-time full-motion video and other surveillance capabilities, drones enabled micromanaging tendencies in the Obama national security team. With their limited capacity and sensitive public profile, they were an easy tool to justify micromanaging. And with a lethal drone policy demanding senior policymaker approval on a frequent basis, such officials engaged regularly with the platform. Drones and micromanagement are close partners.

Tendencies for senior leaders to attempt control of operations via ISR improvements are not new. One former official recalled national security leaders in President Bill Clinton's administration elevating targeting decisions to senior levels during operations in the Balkans,[105] and many have commented on General Wesley Clark's micromanaging the 1999 air campaign in Kosovo from his desk, "engrossed in the drone-video feed streaming on a monitor in his office."[106] After the 1991 bombing of the Amiriyah Blockhouse civilian shelter in the first Gulf War, the air-war planning office had to get senior-level approval from Washington for any subsequent bombings in downtown Baghdad.[107] As one former counterterrorism official put it, once you get access to that sort of real-time information, even if it's not something you can influence in real time, it's hard to turn away.[108]

President Trump and administration officials have indicated several times a desire to move away from

such micromanagement of military operations across the board – "total authorization" to his generals, as the president has said.[109] Unconfirmed reports about their revision to the PPG indicate that in the case of lethal drone strikes specifically, they have moved away from significant senior leader oversight. In doing so, they should exercise some caution. Delegating military operations can be done effectively, but it demands a number of prerequisites not obviously present in this administration.[110]And Obama-era micromanagement practices had some thoughtful rationales worth exploring.

Delegating military operations can be done effectively, but it demands a number of prerequisites not obviously present in this administration. And Obama-era micromanagement practices had some thoughtful rationales worth exploring.

Interviewees for this project generally cast such micromanagement – overall, but of drones in particular – in a neutral to positive light. "Tactical incidents can have strategic effects, and it would be negligent to ignore that," one official said and several others echoed.[111] Many viewed micromanagement of drones as a necessary evil for establishing norms and refining views around a comparatively new national security tool outside generally established boundaries. Some respondents described such micromanagement as an alternative to external transparency and oversight of the lethal drone program (at least early on): in the absence of public scrutiny, policymakers owed intensive personal oversight to these programs.

President Obama himself encouraged such micromanaging tendencies. One respondent noted, "President Obama cared about what human rights organizations had to say. He'd notice reports [on civilian casualties] and ask questions. It set the tone for [management of drone policy]."[112] But on the other hand, there was view that criticisms of drone program did not surface as strongly as they might have because Obama was so integrally involved and people trusted him.[113]

This self-imposed internal oversight reflected noble intentions and had the potential both to be productive and to generate mutual understanding between strategic-level leaders and operators. One respondent noted that, as anomalous as such this situation was, policymakers who understood a military capability in detail and operators who understood policy and its political implications produced fruitful dialogue. But there are clear downsides, which others have outlined, from legal, policy, and military perspectives.

One drawback that emerged in discussions with policymakers was simply the amount of time management of the PPG procedures took, both at the lower/mid levels and at the senior level, and its opportunity cost. A few interviewees highlighted how PPG discussions never skimped on, for example, the legal aspects, even over fairly clear-cut matters. Although such meetings are cast as a positive for oversight, senior official time is finite. If policymakers are absorbed in tactical discussions on targeting, allocation, or employment of drones, they are left with less bandwidth for more strategic debates – for example, what are such strikes meant to accomplish over time.

Given that the PPG procedures operated on their own timeline, with their own discussions, and with their own elaborate standards and processes, the potential for disconnect from the other tools in the counterterrorism toolkit is real. This time-intensive rigor may have crowded out discussion of "the strategic value of UAV strikes" for counterterrorism purposes, strategic goals of the counterterrorism campaign, longer-term alternatives to drone strikes, or the broader security relationship with the target country.[114]

Such micromanagement was not isolated to senior policymakers. One military official mentioned an apocryphal story about a drone feed being used to micromanage ground troops, to which someone reportedly said, "If you want to worry about video game war, worry less about Call of Duty [a first-person-shooter game] and worry more about Command and Conquer [a real-time strategy game]."[115]

But substituting tactical action for strategy may, in some cases, be a deliberate choice. One policymaker commented, "There is something to be said for taking on a problem you can solve [direct action against a high-value target]."[116] Critics may find this comment distasteful, but it acknowledges a difficult reality of U.S. national security: there rarely simple solutions. The United States has been seeking a sustainable strategy to counter terrorism for nearly two decades; the lack of a broadly acceptable answer is not for want of trying. In the absence of such an overarching, effective strategy to defeat terrorism, removing individual enemies from

> **"If you want to worry about video game war, worry less about Call of Duty [a first-person-shooter game] and worry more about Command and Conquer [a real-time strategy game]."**

the battlefield allows policymakers to show Americans that they are taking decisive action and committed to protecting the homeland. "Mowing the grass," as such an approach is frequently called, is a disruptive tactic that has been generally successful in preventing attacks on the homeland, but it has no decisive end and bears little resemblance to the "defeat terrorism" rhetoric used by successive administrations. In the long term, kinetic strikes are no substitute for considering broader strategic aims and whether current tactics meet them. Moreover, such an approach needs to be reconciled with the ways counterterrorism aims – usually discussed in maximalist terms – are communicated with the American public.

For this and other reasons, outside analysts and some of the senior officials interviewed have argued that the Obama-era approach to counterterrorism, including the PPG, is not a sustainable framework for addressing the changing terrorist threat and will need to evolve in the future. As former counterterrorism official Hartig notes, while operational leadership has been degraded by direct action, "top al-Qa'ida-associated groups are far from defeated, and ISIL has arisen " as a widespread threat.[117] Hartig has advocated an approach that, among other things, delegates operational decision authority to the secretary of defense and emphasizes network approaches versus high value targets. By his estimation, this reform would leave senior officials free to focus on the broader strategic counterterrorism goals that direct action and other tools should meet, rather than day-to-day operations. It also would allow time for policymakers to design and implement partnership-based approaches. This recommendation runs counter to the arguments of those who subscribe to the necessity of micromanagement from an ethical perspective, but is worth considering for its potential to elevate strategic debate.

The delegation Hartig proposes would require giving necessary resources and leadership attention to tools that too often lack them: those that address the security and economic conditions that al Qaeda and affiliates are able to exploit. This is hardly a new finding, but as two analysts from the Center for Naval Analyses note about their recent congressionally-mandated assessment of the U.S. war against al Qaeda, "time and time again these supposedly well-known observations are exposed as lip service when strategy is actually executed."[118] Unlike drones, approaches that build security architectures or enhance governance neither lend themselves to senior leaders' micromanagement nor enable micromanaging. But particularly as the Trump administration downgrades its investment in diplomatic and assistance tools, giving these approaches space to be more in the spotlight is a good thing.

That the Trump administration is likely delegating some of the decisionmaking authority for drone strikes and military operations overall to the secretary of defense may be a positive sign of increasing strategic bandwidth. But it is a positive sign only if the administration takes advantage of the opportunity to more fully assess desired end-states for its counterterrorism strategies – globally, regionally, and in specific countries – and is willing to invest in nonkinetic and capacity-building tools and policies to complement its kinetic efforts.

Transparency: Policymakers Believed Drone Transparency Is Critical – But Far More Is Needed.

KEY TAKEAWAYS

- By the end of the Obama administration, key steps had been taken to publicly acknowledge the legal and policy framework that governed the lethal drone program, to describe the decision process used to apply the program, to publicly announce basic information about some strikes, and to recognize (by the government's accounting) civilian casualties.
- Many officials still argued that further transparency is necessary for the sustainability of the strategy.
- The Trump administration seems to be moving counterproductively backward in drone transparency measures and military operations more broadly.
- Enhanced secrecy impedes the public's ability to oversee basic decisions about the scope of military actions taken in their name.

By the end of the Obama administration, key steps had been taken to publicly acknowledge the legal and policy framework that governed the lethal drone program, to describe the decision process used to apply the program, to publicly announce basic information about some (though not all) strikes, and to recognize (by the government's accounting) civilian casualties. These steps were overdue – the Obama administration engaged in more than 200 drone strikes before the president acknowledged them at all in 2012 – but welcome.[119] That said, the transparency – or, rather, the lack thereof – of the Obama drone program was the most uniformly critiqued issue by study participants. Parts of the PPG remain redacted. Moreover, one respondent summarized: "Lack of discussion of numbers of specific drone strikes and numbers of combatant, noncombatants, and unknowns casualties is the most woefully underperformed of President Obama's goals for drone policy."[120] No one who raised the issue believed even the current level of transparency of drone policy or the drone program itself was sustainable, whether strategically or in terms of democratic accountability.

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To consider this in depth, it's worth noting that transparency is not a natural value for the national security community, neither from a policy and legal perspective, nor, more importantly, culturally. Operational security, particularly if American troops or civilians might be at risk, is paramount, and officials are trained from the beginning on the importance of protecting classified information, sources, and methods at all costs. But the years of uncomfortable silence in which, as Steve Coll writes, "Jon Stewart riffed freely about drones on 'The Daily Show,' but at the State Department, a former official there recalled, "we didn't even know if we were allowed to write the word 'drone' in an unclassified e-mail" had an impact.[121] Forced by judicial decisions but also a sense of the need to be more open about American engagement overseas, the Obama administration at least started down the path toward transparency.

Breaking down the components of transparency in use of lethal force is critical to understanding its value (by no means an end in itself). The Columbia Law School Human Rights Clinic and Sana'a Center for Strategic Studies June 2017 report "Out of the Shadows: Recommendations to Advance Transparency in Use of Lethal Force" enumerates various aspects of transparency – transparency about applicable law and policy, transparency about actual strike practices, transparency about government decision-making processes, and transparency about accountability[122] – and why they matter. As two lead authors summarize in Just Security, "Transparency matters for the families of those killed and injured, compliance with international law, protecting the rule of law, democratic accountability, deterring wrongful behavior – particularly important when there is a heightened risk of abuse – and U.S. leadership and credibility."[123]

Interview participants echoed these reasons, with democratic accountability being key among them. "It should not be an option to run a secret war for 15 years. The American people can't be kept in the dark that way," one declared emphatically. Moreover, "If you want

There is a "need [for] broader public accountability even if no one did anything wrong [in a strike that impacted civilians]," one participant noted. "There are adverse impacts [to civilians] that need to be explained and debated."

the public to digest the cost and benefits of a military campaign, there has to be a mechanism for information to surface."[124] The same respondent noted that "people make decisions differently when they believe information is going to come out immediately"[125] – and that that sort of public accountability was lacking for a time.

Others were frustrated with the inability to engage with human rights groups and others on the merits and costs of lethal drone strikes, believing that there was a better story to tell on administration efforts to limit civilian harm than it is currently able to get credit for. There is a "need [for] broader public accountability even if no one did anything wrong [in a strike that impacted civilians]," one participant noted. "There are adverse impacts [to civilians] that need to be explained and debated." Defensiveness and avoiding criticism about these matters may have hindered valuable public debate and even the ability to gain allies on the current counterterrorism strategy. Still, where the Obama administration ended up on transparency was an improvement over where it started.

Then-U.S. Attorney General Eric Holder testifies before the Senate Judiciary Committee on March 6, 2013, as Code Pink demonstrator Medea Benjamin protests against the use of drone strikes. (Chip Somodevilla/Getty)

By some, though not all, counts, the Trump administration seems to be slowly moving backward in transparency measures as they relate to drones. At the outset of the administration, much of the policy framework put in place by President Obama, including features related to making public certain drone strikes, seemed to have remained in place.[126] Subsequent leaks have indicated that a new drone policy is under debate and even signed, but no official details have yet been released. This is itself troubling for advocates of transparency; as Rita Siemion has written, "Robust discussion and debate over Obama's lethal force policy was only possible because the administration disclosed the key aspects of the policy the day after the president signed it, and ultimately released the policy itself."[127] In some cases, strike data is also less available than it was in the Obama administration.

And greater secrecy may prove to be counterproductive. As Elisa Catalano Ewers, Lauren Fish, Michael C. Horowitz, Alexandra Sander, and Paul Scharre write in their recommendations on drone policy for the Trump administration, "The secrecy surrounding U.S. drone strikes has contributed to a perception that they must be illegitimate or unlawful and therefore that drones are not beholden to international law."[128] Time and time again, transparency has proven to be a mechanism to shore up faith in public institutions, giving them both greater benefit of the doubt and enhanced legal footing. Moving backward in this regard may have some minimal operational security benefits, but will almost certainly be replicated by other countries as drones proliferate. As Melissa Dalton notes on the matter of civilian casualties, "failure – or perceptions of failure due to lack of transparency – to address gaps in intelligence and operational procedures that lead to civilian casualties damages U.S. leadership credibility."[129]

The creeping tendency to reassert control over information on American's overseas engagements appear to be a trend in the Trump administration. The Department of Defense has stopped releasing troop numbers that were once public for Afghanistan, Syria, and Iraq. No counter-ISIS strategy – or post-ISIS strategy for Syria – has been made public. Public disclosure of U.S. national security strategy in Afghanistan, Iraq, and other theaters remains limited. Regular leaks emerge about where the administration may be considering expanding kinetic operations (e.g., to Niger), with no public announcements forthcoming. Despite precedent for making such matters public in the past, many are now kept secret under the cloak of operational security. Civil-military expert Jason Dempsey notes, "We can deal with operational security,

while still maintaining democratic accountability about how we fight wars. Accurate troop level numbers are something the public absolutely deserves to know."[130]

Where this leaves us is a challenging moment in which policymakers are able to seek increasing clarity over what happens on the battlefield but are not willing to share those details with the American people, impeding the public's ability to oversee basic decisions about the scope of military actions taken in their name. Congress has begun to push the administration to do better, but more needs to be done to reverse this trend.

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Conclusions and Policy Recommendations

Drones may have changed us, but as the United States leans into a light footprint warfare posture, they should have changed us more. Pursuing national security objectives on the cheap does not demand short-changing strategy, transparency, oversight, or understanding – and with them, the potential for success. Former National Security Advisor H.R. McMaster warned four years ago "Be skeptical of concepts that divorce war from its political nature, particularly those that promise fast, cheap victory through technology."[131] Cheap, easy, and below the radar may be what we want, but it's not what we are getting.

The optimism associated with applying drones, SOF, security assistance, and other low-profile tools is well intentioned: generate low risk to our own forces and limited harm on the societies we are working with and among. But with that should come a realistic understanding of what effects we are generating, what we are actually capable of achieving, and whether these truly are the best means of accomplishing our objectives.

Toward that end, the Trump administration should consider the following:

Policymakers Need to Understand the Military and Intelligence Capabilities They Employ

Senior policymakers in national security have an obligation to understand the basics of military art, strategy, logistics, and resourcing, as well as the intelligence counterparts. This in no way requires they replicate the unique knowledge and experience of the armed forces or the statutory obligations of those providing military advice. But to the extent that policymakers can acknowledge that many capabilities and approaches are vital to their chosen strategies, grasping the benefits, risks, costs, and weaknesses of favored approaches is increasingly necessary. Over time, the Obama administration made some headway toward this objective when it came to drones, and the Trump administration should seek to expedite their education. Should light footprint approaches remain preferred, policymakers should take deliberate steps to educate themselves on the "tooth and tail" of capabilities like drones or special operations forces in a range of missions, their evolution and growth in size and scope, the dynamics of their employment, and any readiness challenges. Site visits to ground control facilities, training, operations centers, proving grounds,

and overseas bases should be a necessary component of such education.

While such understanding at the senior policy level is atypical, the Department of Defense or intelligence community bringing forward challenges in force generation, human capital management, and resourcing to senior national security officials are even more so. The White House Situation Room is not usually a forum for such discussions. To the extent that policy demand for light footprint approaches generates real tradeoffs, stresses, and evolutions in military and intelligence capabilities, national security policymakers outside the Department of Defense and IC need to be a part of that debate. The National Security Council, with the Office of Management and Budget, should collaborate on a series of discussions with appropriate interagency representatives to both highlight these matters and, as necessary, inform strategy and programming decisions.

Going Light Still Demands Public and Realistic Strategies

Understanding capabilities demands understanding the security context such capabilities are operating within and establishing clear strategies to manage that context. As of this writing, the Trump administration has not yet released cohesive theater strategies (Syria, West Africa, etc.) or counterterrorism strategies, nor have they offered more than generic discussions of how it understands use of force. Smaller and more short-term military deployments and lower profile interventions do not lessen the need for transparent disclosure of strategy, nor should these lessen the requirement for congressional and public scrutiny. In his campaign and administration rhetoric, President Trump has indicated he wishes to both downgrade U.S. military commitments and escalate U.S. kinetic aggressiveness against asymmetric threats like the Islamic State, but the case for how this will result in strategic success against any adversary has not been made. These ambitions must be squared publicly and realistically – are maximalist goals of "defeating al Qaeda and ISIS" possible within these limitations? If so, at what cost? If not, with what risk? Whatever the answer, setting clear, public, and realistic goals and objectives around use of force and associated security measures are a necessary precondition to whatever approaches the Trump administration pursues. If the Trump administration is reticent to generate such debates in public, Congress has a number of tools to fulfill its oversight role and initiate such discussions. The recent National Defense Authorization Act (NDAA) provision mandating that the administration submit "legal and policy frameworks governing the United States' use of military force and related national security operations," was a necessary and useful first step – but the Trump administration did not make this report public, nor did Congress seek public hearings about it.[132]

Policy Approaches and Capabilities Require Measures of Effectiveness

Alongside clear and public strategies should come better understanding where and how preferred light footprint capabilities such as drones are most effective; that is, where best to employ them given limited capacity, and where associated costs, benefits, and risks are weighed favorably against alternative approaches and capabilities (including not acting). As the 2014 Stimson Center Drone Task Force suggested, such analysis should take into consideration not only how these means are effective against U.S. goals, but also how they impact "public opinion, litigation, defense policy and government cooperation in allies and partner nations."[133] The Department of Defense and the Intelligence Community should develop and regularly refine mechanisms to study these questions, generate appropriate metrics, and share assumptions with senior policymakers. To the extent such analysis is not sensitive, it should be broadly shared with Congress, the American people, and international partners.

Policymakers Need to Deliberately Consider Policy Alternatives and Complementary Approaches

If policymakers lean into a light footprint, military-centric, under-the-radar approach to addressing asymmetric threats such as ISIS, they need a structured mechanism to think through the inherent choices of this decision. There are clear upsides and downsides to such an approach; there are also second and third order effects that only emerge with concerted evaluation. Senior officials need to set up mechanisms to generate analysis of alternatives of their preferred "light" approach and ensure a demand signal is sent to utilize tools at the appropriate time in the policymaking process. Just as vital is demonstrating an appreciable understanding of what complementary non-military tools are necessary in any policy approach, and whether the United States is capable of employing them. National Security Council driven tabletop exercises and red teaming could address both demands. However, at the senior policy level, such methods are typically focused only on high-risk kinetic scenarios. Exercises that emphasize longer-term or

political-military scenarios – like implications of an airpower centric CT strategy in Yemen or a restricted resource security force assistance strategy in West Africa – should be formally included in policy deliberation at the at the NSC level.

Intelligence Consumption and Analysis Must Be Rationalized

It would be difficult, if not impossible, for a senior official to turn off or slow down a spigot of information and intelligence they'd previously been receiving, which includes both finished "corporate" analysis and raw intelligence at a range of classification levels (often the same products, at the same time, that expert analysts receive themselves). But a more strategic discussion on how administration senior leaders utilize such information, how overall demands are set for both intelligence collection and senior leader access, and how these demands and access impact the intelligence community and implementing agencies would be a worthwhile initiative at the strategic level. Ideally, such discussions would occur at the beginning of the administration, be revisited annually by the national security advisor, his deputies, and their intelligence counterparts, and complement the regular update of the National Intelligence Priorities Framework (necessarily distinguishing between intelligence priorities and intelligence consumption at a range of levels).

More tactically, senior leaders and intelligence officials should confront their personal demands for real time information (provided by drones or otherwise) as they occur in specific scenarios: how they are distinct from finished intelligence, what is to be gained by increased but never full proof certainty, the costs and risks associated with acquiring it both at the time, and what such shifts in demands may mean for intelligence personnel and capabilities over the long term. The Director of National Intelligence should conduct occasional reviews of specific events in senior official intelligence consumption with appropriate discussion at the national security principal and deputy level of these questions.

Artificial intelligence offers a potential tool for managing the firehose of information collected and available to the national security community. However, national security leaders at the highest levels should give personal attention to the initial forays into artificial intelligence applications in analyzing imagery and full motion video. Efforts like the Department of Defense's "Project Maven," a nascent initiative to quickly move AI technology into active combat theaters, may show real promise in minimizing the human capital analytic burden associated with the thousands of hours of video collected from drone platforms. But real ethical concerns will be embedded in the application of this technology to any activities related to the identification of targets or other consequential national security calls. Senior officials both in and out of the defense and intelligence community should invest time in understanding how the assumptions that undergird these technologies will be built, modified, and tested – an onerous process at first, but one that will pay dividends as such technologies become more widespread. They should also understand associated safeguards and means by which adversaries may game such systems as they are already likely doing with human analysts. The national security council should host a series of deep dives addressing these issues as the principal and deputy level.

Managing Micromanagement

To cope with challenges associated with micromanagement, senior policymakers must recognize four fundamental elements of the relevant debate. First, current technological and media trends encourage and enable senior micromanagement of tactical events and will continue to do so – micromanagement is incentivized and often rewarded at senior levels. Second, while senior level micromanagement can be harmful, it is not inherently bad, and tactical events can and do have strategic effects worthy of senior-level attention. Third, micromanagement in national security is generally meant to make up for a lack of something policymakers otherwise expect – public and congressional scrutiny, application of expertise, a governor on overzealous measures, or pressure from partners. And finally, efforts to counter micromanagement by delegation alone are not sufficient.

The Trump administration may be inclined to pursue a far more lax approach than their predecessors in overseeing military operations – including and beyond drone usage – but they will find there is little benefit to expecting the Department of Defense or its lower level commanders to replicate the strategic and political responsibility of the White House and the expertise and relationships of the broader interagency.

Given these dynamics, delegation and empowerment of lower level defense and military decisionmakers requires several factors the administration should invest in. These include, first of all, trust between and among the president, national security officials, and subordinates, and a clear understanding of "the administration's political philosophy about America's role in the world as

well as other more operational issues, such as risk tolerance for failure, escalating costs, casualties, and mission creep, to name a few,"[134] as the author wrote with Janine Davidson. Second, when it comes to efforts related to or enabling use of force by U.S. or partner forces, the administration should clearly document what decisions merit what level of approval and regular re-review (e.g., presidential, interagency, delegated to the secretary or his staff, or regional and local commanders), and game out potential risks and consequences of such delegation to the satisfaction of all interagency players. Establishing such clarity will grow more important as appointees fill the ranks of the Office of the Secretary of Defense and the State Department. Third, beyond clearly laying out expectations and shared assumptions, national security leaders should ensure that it is not only the military that is empowered by delegation: interagency counterparts in Washington and in the field must likewise be empowered to engage, debate, enable, and even countermand their uniformed partners if complex decisions will be delegated to lower levels.

For drone policy specifically, as previously discussed, the Trump administration has indicated its intent to dispense with the intensive senior-level interagency review of drone operations from the Obama administration in favor of annual country plans and delegation to operational agencies. This approach has potential plusses and minuses as noted previously, but can only be effective if the implementation absorbs the scrutiny, transparency, risk calculus, and judgment hurdles senior-level micromanagement had been meant to provide. First, senior leaders should use the bandwidth they have gained in sacrificing micromanagement to develop effective strategic guidance for drone operations. Country plans must be multi-faceted and beyond strict CT efforts, with inputs from across the interagency and country team. They should include clear objectives, metrics, and scenarios that trigger senior official reconsideration. Second, operational agencies should maintain and expand transparency of drone operations to relevant country team and Washington-based stakeholders. Further, these stakeholders should have access to some mechanism to exercise input and concern over broader trends or changes in drone operations (e.g., individual country team and deputy-level senior leaders could request mid-year review of country plans or deputy-level review of operations on an on-demand basis). Lastly, if senior-level micromanagement was oversight the Obama-era NSC team felt it owed in lieu of public scrutiny, the Trump administration should make up this gap by permitting further public transparency of its drone operations (discussed below).

Resetting Congressional Oversight

A later paper in this project will address the necessity of updating the AUMF from a congressional perspective. But senior policymakers in the Trump administration would also benefit from rationalizing congressional oversight of drone policy specifically and light footprint warfare writ large. Congress has, in general, made the execution of the kinetic global war on terror (including drone strikes) easy for three successive administrations. The Trump administration has encouraged them continue to do so, opposing revision of the present AUMF and requesting that any revision be unbound by geographic or time constraints.

Reversing this policy in any way may seem illogical. But the Trump administration should consider that past drone operations in prior administrations have generated little incentive to check U.S. counterterrorism policy for any reason. The Obama administration responded to this dynamic by manufacturing its own constraints, which the Trump administration has in part dispensed with. As comparatively low-cost, low-profile capabilities that generate comparatively less on-the-ground feedback for policymakers, the natural brakes on use of force appear weaker for drone operations. As the Trump administration shifts its focus and investments toward great power competition, generating mechanisms that force evaluation of their counterterrorism policies should be worthwhile to them – and seeking Congress's enhanced oversight of military force may be the best option to do so. The Trump administration should revisit their policy on how to approach the 2001 AUMF; specifics on how they may do so are considered in the subsequent paper in this series.

At the same time, policymakers and their congressional counterparts should closely examine what actions they have rendered relatively easy to execute, and which ones remains fraught with barriers. In terms of congressional oversight (in law and, more often, practice), it is far easier to initiate armed drone operations in a new country than it is to launch a new assistance program on democracy and governance; likewise, one is sure to receive adequate funding while the other may not. Even certain security assistance programs intended to improve rule of law and oversight of military force are more difficult to implement from an oversight perspective than a drone strike. Imbalances in resources and personnel will be difficult to reset across USG agencies, but a fresh look

at the what legal and regulatory barriers the administration faces in implementing its broader counterterrorism policy, and whether those barriers unintentionally discriminate against non-kinetic approaches, is worth doing. The Trump administration should initiate such a review at the NSC staff level and develop a strategy to rationalize its toolkit.

Generating Dialogue on Civilian Harm

Senior policymakers in the Trump administration should confront three evolutions in matters of civilian harm in the near term. First, they need to acknowledge that the nature of American warfare has evolved substantially over the last two decades in ways that impact public and government perception of civilian harm. In the counterterrorism realm, adversary shifts toward a networked threat that is well embedded within urban civilian populations have overlapped with an increasing preference for light footprint, partner-enabling, American commitments. Consequently, U.S. methods for preventing, measuring, and addressing civilian harm are necessarily quite different from the heavily ground-centric approaches of the Bush and early Obama administrations.

Second, assumptions about the effectiveness and prioritization of civilian harm prevention efforts have not consistently evolved in parallel. U.S. policy statements declare that preventing civilian casualties is a top concern, and no one does more than American forces to effect such a policy. But realistically a caveat should be placed in such statements: preventing civilian casualties is a top concern within the bounds of the limited resources of American counterterrorism operations. Simply put, the resources to prevent, measure, and address civilian casualties are different than in recent counterinsurgency-centric experience in Iraq and Afghanistan, and it is unclear the degree to which policymakers have clearly understood this transition. Particularly with many policies and practices inherited by the Trump administration from prior NSC team, a knowledge gap likely exists.

Third, relations between the USG – particularly the military – and organizations monitoring civilian harm are increasingly distrustful. This dynamic poorly serves U.S. strategic interests regardless of the merits of that distrust. It is understandable that each would maintain different perspectives on civilian harm, but that the gaps between how each measures and evaluates civilian harm appears to be widening.

Senior officials need to dedicate time to understanding each of these evolutions, particularly the strategic consequences of civilian harm and the gap in credibility between how the USG portrays its efforts to protect non-combatants and how they are perceived by key stakeholders. Many reports have offered dozens of practical recommendations to the Department of Defense, State, and intelligence community to better prevent, measure, and respond to civilian harm. These are more than worthy of consideration. But a prelude to these more tactical moves is also necessary: starting a broad internal and external dialogue on civilian harm, how it is understood across communities, and its impact on national security interests. Such an effort might start with a National Intelligence Estimate on the scope, impact, and perceptions of civilian harm in appropriate regional contexts. It should also include technical briefings to senior NSC officials to offer clear understanding of how targets are developed and how civilian casualties – and more broadly civilian harm – are measured. Senior leaders should also engage in a serious lessons learned process from recent urban campaigns in Mosul or Raqqa. Such discussions, and future operational debates, should include options that may enhance the effectiveness preventing, measuring, and responding to civilian casualties, even if such options substantively change the scope and size of the mission.

More public and expert engagement by senior policymakers is necessary as well. Luke Hartig in the Drone Playbook and the Stimson Center's 2014 Task Force on Drone Policy offer a baseline for such a concept: establishing a commission or advisory board on issues related to lethal drone policy, reporting to the president, to including experts from security, intelligence, human rights, legal, and other fields. Such a body might take a variety of worthy approaches to advise the administration. But three priority tasks could be (1) generating recommended public standards for the measurement of civilian casualties and civilian harm in areas of operations, (2) formally assessing the gaps between government and non-government reporting on civilian casualties in specific campaigns and (3) and formally identifying additional ways for non-government and media organizations to contribute to USG efforts to prevent and measure of civilian casualties (presently such inputs are only taken inconsistently). While other tasks are equally important, these two should be important to senior officials by smoothing the way for more productive partnership between the USG and relevant civil society organizations in this field.

Increasing Transparency of Drone Policy and Drone Operations

The Trump administration should publicly announce its revised drone policy. That is has not done so furthers the risk that Congress and the American people will be too distanced from American applications of military force abroad, and thus too disconnected from the decisions senior policymakers take and implement in their name. It further inadvertently implies that such drone operations are extrajudicial, outside the bounds of traditional norms and laws on use of force and should remain behind closed doors; other international drone users will surely take note.

The Trump administration should likewise, at minimum, revert to the public disclosures of drone strikes and civilian casualties established at the end of the Obama administration and openly announce to both Congress and the American people where it intends to expand such operations. To the extent that commands are offering different levels of transparency at different speeds and accuracy, leaders should ensure lessons should be cross-applied across the Department.

Pursuing these steps toward further transparency, as Rita Siemion notes, should not only be important to senior officials as an end in itself. The sustainability and legitimacy of these operations, as well as the USG's ability to both tout American successes and correct the record when false accusations are made, rely on increasing public understanding of the specifics of drone operations.[135] While limitations can be applied for operational security, such limits should not preclude greater public engagement.

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