

# Expectations and Realities of U.S. Targeting Intelligence

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## Abstract

Targeting intelligence is a challenging endeavor. To avoid collateral damage and civilian casualties, not only is a high degree of precision required from the operators conducting the strikes, but also a near certainty of target identification in the moments before a targeted strike. In recent years, misinformed “targeted strikes” of the *Médecins Sans Frontières* (MSF) hospital in Kunduz, Afghanistan and elsewhere have led to significant collateral damage, including hundreds of civilian deaths. Because of the challenging environment that these agencies operate in, this paper discusses whether it is reasonable to expect intelligence and defense agencies to have 100 percent certainty before conducting a targeted killing mission. This paper explores the intelligence processes that agencies use to conduct strikes. It also addresses the strengths and weaknesses of various intelligence disciplines in the context of targeted killings in order to allow for an informed conclusion to be made about the level of accuracy that should be expected from agencies conducting targeted kill missions. Due to the large scope of this topic, this paper primarily focuses on the United States (U.S.) policy of targeted killings in the Middle East.

## Introduction

Throughout its history, the United States (U.S.) has generally engaged in war in response to direct aggression by state actors. National security policies have centered on how to defend the U.S. homeland from foreign states.<sup>1</sup> However, this focus shifted following the attacks of September 11, 2001 (9/11). The principles of “great power politics” seemed to have less influence as the emergence of aggressive non-state actors like al-Qaeda took the place of state actors as the greatest threat to U.S. national security. As the threats to the United States changed with the dawn of the new millennium, so too did the nature of war and the tools used to combat these evolving threats. One tool that emerged over the past 15 years since 9/11 is the U.S. policy of targeted killings. In the old paradigm of intense state-centric competition, targeting a specific individual rarely made sense in the grand scheme of a country’s objectives to ensure security for its citizens.<sup>2</sup> In this new paradigm, however, the nature of war has become less about ensuring total domination of an enemy and more about controlling populations and gaining a relative advantage over the enemy by strategically targeting key individuals.<sup>3</sup> With the rise of asymmetrical warfare, the battlefield has become less clear and the enemy less defined. Because of this, targeting specific individuals of influence has become a necessity for gaining a relative advantage over the enemy, especially for the U.S.. The targeted killings program, which has killed thousands since 9/11, is viewed by the U.S. as both efficient and accurate for taking out specific targets while limiting collateral damage and reducing the threats to U.S. personnel.<sup>4</sup>

However, an accidental bombing of a *Médecins Sans Frontières* (MSF) in Kunduz, Afghanistan caused by failed intelligence assessments challenged these assumptions, as did the hundreds of civilians killed by US targeted strikes.<sup>5</sup> Given the challenging environment that these agencies operate in, is it reasonable to expect intelligence and defense agencies to have 100 percent certainty before conducting a targeted killing mission? Put another way, should these agencies be held to a higher standard than they are currently? Or is it reasonable to expect that, due to the limits of targeting intelligence and the uncertain nature of war, these agencies and actors will occasionally conduct strikes that result in collateral casualties? Based on the evidence, this paper argues that while it is challenging to produce faultless targeting intelligence, there are tangible ways to improve the intelligence systems and processes used to target individuals. By addressing the strengths and weaknesses of intelligence (human, signals, imagery, etc.) used in targeted killings, I conclude that the level of accuracy expected from agencies that conduct these missions must improve, and I explore potential solutions. This paper also addresses the legal aspects of targeted killings and whether the practice is lawful as defined by international norms and laws. By summarizing the debates on the legality of targeted killings, this paper discusses how an undefined and ambiguous legal framework can lead to civilian casualties. This paper argues that both the legal aspects and practical intelligence functions of targeting

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<sup>1</sup> Patterson and Casale, “The Ethical and Practical Implications,” 638.

<sup>2</sup> Ibid., 640.

<sup>3</sup> Krishnan, “Targeting Individuals,” 284.

<sup>4</sup> Patterson and Casale, “The Ethical and Practical Implications,” 639.

<sup>5</sup> Downie, “Obama’s Drone War,” May 5, 2016.

congruently contribute to the issue of civilian casualties. Due to the large scope of this topic, this paper primarily focuses on the U.S. policy of targeted killings within the Middle East as part of the global war on terror.

## Defining Targeted Killings

In order to sufficiently understand how intelligence is used within the context of targeted killings, the practice of targeted killings must first be defined. In a special 2010 report on targeted killings, the United Nations defines the practice as follows:

A targeted killing is the intentional, premeditated and deliberate use of lethal force, by States or their agents acting under colour of law, or by an organized armed group in armed conflict, against a specific individual who is not in the physical custody of the perpetrator.<sup>6</sup>

Security experts Eric Patterson and Teresa Casale distinguish targeted killing from assassination by describing the former as “legitimate use of force directed against specific enemy combatants.”<sup>7</sup> While these two definitions vary slightly in their content, they both clearly depict the practice as being lawful, regardless of whether it is or not. The methods by which a perpetrator intentionally and deliberately uses lethal force on a target can include, but are not limited to, strikes from helicopters, gunships, fighter jets, drones, and car bombs. However, for the purpose of this paper, which focuses on U.S. foreign policy in the Middle East, the discussion focuses on the use of drones, or “unmanned aerial vehicles” (UAVs).<sup>8</sup>

## Background on U.S. Targeted Killings

The term “targeted killing” is relatively new, but the practice of systematically tracking, monitoring, and eventually eliminating a specific target within the context of war is not a novel concept in U.S. history. During the Vietnam War, the U.S. Central Intelligence Agency (CIA) implemented the Phoenix Program, where alongside South Vietnamese forces, the CIA systematically tracked, targeted, and neutralized around 80,000 suspected Viet Cong agents. Of these, 40,000 were killed.<sup>9</sup> Around this same time, the U.S. also provided material support to Operation Condor, which was a secret arrangement between Chile, Argentina, Brazil, Uruguay, Paraguay, and Bolivia to share intelligence and develop a systematic method for targeting and neutralizing mutual opponents.<sup>10</sup> In the aftermath of the 1983 bombing of the barracks of the U.S. Marine Corps in Beirut, President Ronald Reagan established a program that trained and equipped Lebanese

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<sup>6</sup> Alston, “Extrajudicial, Summary or Arbitrary Executions,” 4.

<sup>7</sup> Patterson and Casale, “The Ethical and Practical Implications,” 639.

<sup>8</sup> Alston, “Extrajudicial, Summary or Arbitrary Executions,” 4.

<sup>9</sup> Krishnan, “Targeting Individuals,” 280.

<sup>10</sup> Kornbluh, *The Pinochet File*, 332.

assassins to kill Hezbollah members responsible for the attack.<sup>11</sup> While the targeting and killing of specific individuals by the U.S. is not a new practice, as described above, openly admitting to it outside the theater of war and using sophisticated technology that limits the risk to U.S. personnel are relatively novel developments.

The use of the term “targeted killings,” as described in this paper, began only after the attacks on 9/11. The first targeted kill mission after 9/11 that can be credibly verified occurred on November 3, 2002. A CIA-controlled predator drone, operating just outside of Sanaa, Yemen, shot a Hellfire missile at a car carrying Qaed Senyan al-Harithi, the al-Qaeda leader responsible for the bombing of the U.S.S. Cole in 2001. It killed al-Harithi and five other al-Qaeda operatives.<sup>12</sup>

In the years following, the U.S. drone program expanded its targeted kill missions exorbitantly. Under President George W. Bush, the U.S. began systematically killing suspected terrorists in Yemen, Pakistan, Somalia, and elsewhere. When President Barack Obama came in to office in 2009, the CIA-led drone program became the new President’s tool of choice for eliminating suspicious targets in the Middle East and North Africa. Bush authorized approximately 50 drone strikes over his Presidency,<sup>13</sup> while Obama greatly expanded the program by authorizing 473 strikes between 2009 and December 31, 2015, according to White House estimates.<sup>14</sup> Among these 473 airstrikes, the Obama administration claimed that these incidents killed between 2,372 and 2,581 “combatants,” while limiting civilian deaths to between 64 and 116.<sup>15</sup> Both of these estimates have been criticized by media, NGOs, politicians, and others as being dramatically understated. During the same period, the Bureau of Investigative Journalism placed the number of overall kills at a similar figure but claimed that civilian deaths ranged from between 380 to 801.<sup>16</sup> Other groups have argued that the real number is even higher.<sup>17</sup> Actual figures are hard to come by due to the difficulty of obtaining data on drone outcomes especially in places like Pakistan’s Federally Administered Tribal Areas, which are essentially off limits to foreigners and researchers who could objectively verify the impact of the strikes.<sup>18</sup> It is similarly challenging to determine what constitutes a civilian causality when the criteria that the U.S. uses to determine who is targeted are secret.<sup>19</sup> While the actual number likely falls somewhere in between these figures, the fact that there has been significant collateral damage over the years has resulted in significant scrutiny of Obama’s policies on targeted killing.

In 2013, Obama stated in a speech that the U.S. would not perform a targeted kill mission unless there was “near certainty that no civilians [would] be killed or injured.”<sup>20</sup> However, the statistics on civilian deaths indicate that either Obama is using political rhetoric to euphemize the facts on the ground, or that the intelligence used to determine whether or not a strike is authorized consistently fails to predict the potential for collateral

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<sup>11</sup> Naftali, *The Secret History of American Counterterrorism*, 148.

<sup>12</sup> Alston, “Extrajudicial, Summary or Arbitrary Executions,” 7.

<sup>13</sup> Zenko, “Obama’s Embrace of Drone Strikes,” January 12, 2016.

<sup>14</sup> Ackerman, “Drones Strikes,” July 1, 2016.

<sup>15</sup> Ibid.

<sup>16</sup> Serle, “Obama Drone Casualty Numbers,” July 4, 2016.

<sup>17</sup> Ackerman, “41 Men Targeted,” November 24, 2014.

<sup>18</sup> Fair, “Second-class Citizenship in Pakistan,” 221.

<sup>19</sup> Alston, “The CIA and Targeted Killings,” 285.

<sup>20</sup> Obama, “Remarks by the President,” May 23, 2013.

damage resulting in civilian deaths.<sup>21</sup> Is it reasonable to expect U.S. intelligence agencies, particularly the CIA, to provide absolute certainty of little to no collateral damage when delivering targeted strikes? What are the limits of intelligence that prevent the CIA from providing risk-free assessments? Compared to other programs, how does the targeted killing program match up in regards to accuracy and limitation of civilian casualties? Is the issue of civilian casualties really the result of poor intelligence or rather the ambiguous legal framework that currently surrounds the practice of targeted killings? These questions are discussed in detail in the following sections.

## The Legality of Targeted Killings

The expansion of drone warfare and targeted killings under former President Barack Obama was grounded in the concept of just war theory. In his acceptance speech for the Nobel Peace Prize in 2009, he made the following remarks:

[Over] time, as codes of law sought to control violence within groups, so did philosophers and clerics and statesmen seek to regulate the destructive power of war. The concept of a ‘just war’ emerged, suggesting that war is justified only when certain conditions were met: if it is waged as a last resort or in self-defense; if the force used is proportional; and if, whenever possible, civilians are spared from violence.<sup>22</sup>

While Obama was making his momentous speech, the U.S. continued to systematically target and kill individuals around the world that were perceived to be enemies of the U.S., justified by the belief that these actions fit under the mold of a just war.

The concept of a just war has evolved over time, as has its interpretation in modern warfare. Some scholars take a more traditional interpretation of a just war that requires there to be proportionality, probability of success, minimal likelihood of civilian casualties, and use as a means of last resort.<sup>23</sup> However, others argue that laws of armed conflict should account for the “elasticity of war,” and that broad definitions of armed conflict help to account for the changing nature of war.<sup>24</sup> Scholars under this school of thought argue that the criteria for a just war should be defined by just cause and right intention.<sup>25</sup> This broad interpretation of a just war led to events like the Iraq War and the global war on terror, where the U.S. used the concept of just war in a preemptive manner to target entities that could be a threat to the U.S. in the near or distant future. Under this line of just war rationale, the whole world is a battlefield where “today’s threat is just as real from seven thousand miles away as it is from ten feet away.”<sup>26</sup> While opponents to this school are quick to categorize such views as exaggerated, states do have a legal and moral right to defend themselves against terrorism and the “non-traditional nature [of terrorism]

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<sup>21</sup> Shane, “Drone Strikes Reveal Uncomfortable Truth,” April 23, 2015.

<sup>22</sup> “Obama’s Nobel Remarks,” December 10, 2009.

<sup>23</sup> Brunstetter and Braun, “The Implications of Drones,” 342.

<sup>24</sup> Mallette-Piasecki, “Missing the target,” 297.

<sup>25</sup> Brunstetter and Braun, “The Implications of Drones,” 342.

<sup>26</sup> Mallette-Piasecki, “Missing the Target,” 297.

must affect the ethical and strategic considerations that inform targeted killings.”<sup>27</sup> If clear guidelines are established about who can be targeted and what level of proof is required to determine whether an individual is culpable of specific terrorism offences, targeted killings could certainly be brought into a stronger legal position.

While the specific issue of targeted killings by drones has not resulted in any sort of consensus in terms of international law, the laws of armed conflict, defined primarily by the Geneva Conventions, do provide some context to the issue. One of the primary purposes of the Geneva Conventions is to protect individuals “who are not taking part in the hostilities.”<sup>28</sup> Similarly, customary international law positions that a state “use the least harmful means available to accomplish their legitimate military purposes.”<sup>29</sup> One could argue that because drones are perceived to be more precise than conventional weapons, the U.S. is in fact being lawful because they are using the “least harmful means” to protect its national security. This in turn also results in less harm being done to individuals not engaged in the hostilities. On the other hand, others may argue that the global targeting of individuals outside of areas of active hostilities does not meet the threshold of legitimate military purposes and the principle of due process.<sup>30</sup>

Outside the realm of just war theory, others have argued for the lawful practice of targeted killings during peacetime, thus nullifying the need to justify targeted strikes through the concept of a global war on terror. The Parks Memorandum interprets that while article 2(4) of the Charter of the United Nations limits states’ ability to use force, article 51 of the Charter “recognizes the inherent right of the self-defense of nations” including in peacetime.<sup>31</sup> Parks argued in the memorandum that the U.S.’ use of force in peacetime has been the result of another nation failing to protect “U.S. citizens from acts of violence originating in or launched from its sovereign territory.”<sup>32</sup>

While the above discussion highlights only a small segment of the debate surrounding the legality of targeted killings, it does underscore the fact that the issue is far from settled. Strong arguments are made from both sides as to whether targeted drone strikes are legal within the context of international law, but at this point in time there is little to no consensus as to how, when, or if the practice is lawful.

Whether or not targeted killings are determined to be lawful under the designation of international law, it is clear, in the words of Kenneth Anderson, that drones and targeted killings will “become a weapon of choice for future presidents, future administrations, in future conflicts and circumstances of self-defense and vital national security of the United States.”<sup>33</sup> This does not mean, however, that the legality of targeted killings should not be questioned and debated—it should—but while this debate occurs and the use of targeted killings continues, the immediate goal should be to determine how to improve the practice of targeted killings to mitigate the risk of exceptional collateral damage. Refining the intelligence processes and collection methods used to carry out targeted strikes is one concrete way to meet this end.

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<sup>27</sup> Blum and Heymann, “Law and Policy,” 168.

<sup>28</sup> Mallette-Piasecki, “Missing the Target,” 297.

<sup>29</sup> Barela and Plaw, “The Precision of Drones,” August 23, 2016.

<sup>30</sup> Brunstetter and Braun, “The Implications of Drones,” 342.

<sup>31</sup> Blum and Heymann, “Law and Policy,” 161-162.

<sup>32</sup> *Ibid.*, 162.

<sup>33</sup> Anderson, “Rise of Drones,” March 23, 2010.

## The Strengths and Limits of Intelligence for Targeting Purposes

When conducting airstrikes and kill missions in a state outside of a targeting country's theatres of operation, intelligence is critical for the targeting nation to hit its intended mark, and for limiting collateral damage. The targeting nation must rely on a wide array of intelligence products from various sources and intelligence disciplines in order to reduce the amount of uncertainty in any given situation. Through a recent leak of a study done by the Pentagon Task Force on Intelligence, Surveillance, and Reconnaissance (ISR), new information is available about the types and sources of intelligence that make up a targeting package used to justify a particular targeted kill mission. The study, which was initially disclosed by *The Intercept*, the same journalism team that released the Snowden revelations in 2013, documents the challenges of collecting and analyzing targeting intelligence by using a case study of drone strikes perpetrated by the U.S. Joint Special Operations Command (JSOC) between 2011 and 2012.<sup>34</sup> The example below also highlights the limits of signals intelligence (SIGINT), human intelligence (HUMINT), and other forms of intelligence that are relied upon in targeting missions.

### *Yemen and Somalia Case Study*

While the Pentagon's ISR study on intelligence should not be viewed as fully representative of UAVs and targeted killings in general, it provides valuable insights into the challenges that occur with the development of targeting intelligence. The study highlights an issue referred to as the "tyranny of distance,"<sup>35</sup> which indicates the large distances that UAVs and manned aircrafts had to travel from far off bases to their areas of operation. In Yemen, mission targets were often located more than 500 km from the drone base in Djibouti; in Somalia, that figure was closer to 1,000 km.<sup>36</sup> When a drone or manned aircraft must sometimes spend up to half of its air time in transit to and from its destination, it means that it spends less time conducting aerial surveillance necessary for confirming a target. In the case of Yemen and Somalia, sparse resources resulted in aircrafts needing to cover more airspace and potential targets, which resulted in surveillance "blinks," or gaps in time when a particular target was not being monitored.<sup>37</sup> This in turn led to a disruption in the military's "unblinking eye" of constant surveillance on all relevant targets. It presents a scenario where a target can slip away during a surveillance blink without the U.S. noticing. Without secondary sources of intelligence, the targeting information now becomes compromised, potentially leading to an airstrike on an area where the intended target is no longer located.

The sources of targeting packages in Yemen and Somalia between 2011 and 2012 are also notable. The Pentagon study highlights the fact that HUMINT made up approximately 40 percent of targeting package sources in this time period, while SIGINT made up the rest. Both of these sources were referred to as being "neither as timely nor as focused as tactical intelligence" compared to the cases of Afghanistan and Iraq that relied heavily on intelligence from interrogations, seized documents, and media. Because the

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<sup>34</sup> ISR Task Force, "ISR Support," February, 2013.

<sup>35</sup> Currier and Maass, "Firing Blind," October 15, 2015.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

missions in Yemen and Somalia were outside the theater of active U.S. military operations, unlike Afghanistan and Iraq, the U.S. essentially relied solely on tactical airstrikes in these countries. They often eliminated the target and its immediate surroundings, thus rendering it impossible to attain such superior forms of tactical intelligence.<sup>38</sup> When targeted kill missions occur, there are generally no agents on the ground to collect “document and media exploitation” (DOMEX), or “tactical interrogation reports” (TIR), but these methods of gathering intelligence are invaluable for identifying future targets.<sup>39</sup> Incomplete intelligence has significant consequences. The overreliance on SIGINT and HUMINT in Yemen and Somalia led to significant shortfalls in capabilities, according to the study, resulting in less than accurate strikes and wrongful civilian deaths.<sup>40</sup> In a separate case in Afghanistan, referred to as Operation Haymaker, U.S. targeted airstrikes killed more than 200 individuals and only 35 of those were the intended targets. At certain points throughout the operation, close to 90 percent of the victims were not the intended targets.<sup>41</sup>

It should be noted that the above case studies are likely not representative of the drone/targeted killing program as a whole. In some places, like Pakistan, it is argued that the drone program is significantly more accurate.<sup>42</sup> This is due to the Pakistan program being led by the CIA, which has spent years developing intelligence gathering operations in the region.<sup>43</sup> It contrasts significantly with the Yemen and Somalia missions, which were led by the Department of Defense (DoD). The DoD arguably has less oversight and accountability in the realm of targeted killing missions than the CIA.<sup>44</sup> In the case of the CIA, the President is required to notify both the Senate and House Intelligence Committees of all covert actions that are taken, including targeted killing missions, and provide any applicable materials to the committees when requested.<sup>45</sup> The President must also issue a presidential finding that explains how the strike supports the United States’ foreign policy and national security objectives prior to carrying out any covert activity.<sup>46</sup> In contrast, the Joint Special Operations Command, which carries out the U.S. military’s targeted killings, has no similar reporting requirement to the Armed Services Committees.<sup>47</sup> In part because of the DoD’s less stringent oversight mechanisms, the U.S. military, it appears, is more prone to flawed intelligence assessments in the area of targeting. It was on this basis that President Obama decided to task only the CIA with targeting and killing Anwar al-Awlaki, the U.S. born Muslim cleric accused of inspiring and planning terrorist operations for al-Qaeda, instead of utilizing intelligence from both entities.<sup>48</sup> This caused significant debate over whether drone strikes should be amalgamated under one agency or department.<sup>49</sup> But regardless of whether the CIA or the Pentagon is in charge of targeted

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<sup>38</sup> Ibid.

<sup>39</sup> ISR Task Force, “ISR Support,” February, 2013.

<sup>40</sup> Ibid.

<sup>41</sup> Friedersdorf, “The Obama Administration’s Drone-Strike Dissembling,” May 14, 2016.

<sup>42</sup> Fair, “Drone Papers,” October 28, 2016.

<sup>43</sup> Walsh, “The Effectiveness of Drone Strikes,” September, 2013.

<sup>44</sup> Fair, “Drone Papers,” October 28, 2016.

<sup>45</sup> 50 U.S. Code § 3093.

<sup>46</sup> Ibid.

<sup>47</sup> Goldsmith, “Questions about CIA,” May 13, 2014.

<sup>48</sup> Goldsmith, “How Obama Undermined,” May 1, 2013.

<sup>49</sup> Dilanian, “Proposal for CIA,” May 11, 2014.

killings, there have been failures in targeting intelligence on both sides and that needs to be addressed.

While the Yemen and Somalia cases suffer from significant selection bias, they do highlight that in complex operating environments and missions, such as the ones described above, success is dependent on accurate and complete intelligence. Regardless of which intelligence source is better, each source has a key role to play in developing comprehensive targeting packages. Without all-source intelligence, analysts cannot develop a complete picture of the theatre of operation. This has deadly consequences in the area of targeted killings. The table below compares and contrasts the strengths and weaknesses of the most prevalent sources of intelligence that are utilized for targeting.

### Comparison of Sources of Targeting Intelligence<sup>50</sup>

Source	Strengths	Weaknesses
<b>Human Intelligence (HUMINT)</b>	<ul style="list-style-type: none"> <li>○ May provide coverage in areas beyond the capabilities of other sources (i.e. underground, internal facilities)</li> <li>○ May reveal direct/indirect relationships between targets</li> <li>○ Can give real-time target intelligence via radio transmissions</li> <li>○ Can provide documentary evidence of enemy activities</li> <li>○ Can uncover intention of targets<sup>51</sup></li> <li>○ Corroborates technical intelligence<sup>52</sup></li> </ul>	<ul style="list-style-type: none"> <li>○ Time lag between collection, reporting, and verifying some information can be so long as to render it useless</li> <li>○ Collection success cannot be predicted with certainty</li> <li>○ Dissemination and fusion of information into targeting channels is often inadequate and difficult to accomplish</li> <li>○ Determining reliability of the source and verifying the information is often very difficult</li> </ul>
<b>Signals Intelligence (SIGINT)</b>	<ul style="list-style-type: none"> <li>○ Potential for almost instantaneous information</li> <li>○ Can sometimes reveal specific information on enemy units</li> <li>○ Levels of activity and significant changes in these levels can often be determined</li> <li>○ Organizational structure and order of battle may be obtained</li> <li>○ Can cue other systems</li> <li>○ Equipment capability can be learned</li> </ul>	<ul style="list-style-type: none"> <li>○ Data may be denied by use of secure communications</li> <li>○ False information may be passed by the enemy for deception purposes</li> <li>○ Collection subject to atmospheric conditions</li> <li>○ Locations derived from SIGINT may be imprecise</li> <li>○ Specially configured collection platforms required</li> <li>○ Use of SIGINT collection platforms requires extensive coordination between collectors and users</li> </ul>

<sup>50</sup> Unless otherwise noted, sources in table are quoted from *USAF Intelligence Targeting Guide*, February 1, 1998.

<sup>51</sup> Margolis, "The Lack of HUMINT," 56.

<sup>52</sup> Ibid.

	<ul style="list-style-type: none"> <li>○ Emitter location can be approximated or pinpointed</li> </ul>	
<b>Imagery Intelligence (IMINT)</b>	<ul style="list-style-type: none"> <li>○ A variety of platforms and media are available</li> <li>○ Capable of pinpointing target position</li> <li>○ Activity can be detected</li> <li>○ Order of battle can be counted</li> <li>○ Target characteristics (physical or environmental) can be studied in detail</li> <li>○ Large area collection possible</li> <li>○ Excellent resolution possible</li> <li>○ Highly credible because it can be seen by the user</li> </ul>	<ul style="list-style-type: none"> <li>○ Except for radar, imagery quality is normally degraded by darkness or adverse weather.</li> <li>○ Subject to deception or concealment techniques</li> <li>○ Requires extensive support facilities</li> <li>○ Can be expensive</li> <li>○ Subject to misinterpretation or misidentification</li> <li>○ Situation represented on the image may exist only for the instant it was captured</li> </ul>
<b>Open-Source Intelligence (OSINT)</b>	<ul style="list-style-type: none"> <li>○ Often presents an “insider’s view”</li> <li>○ Frequently provides a source of pictures and information not obtained from any other source</li> <li>○ Gives insight into another’s thought processes and intentions</li> <li>○ May be the timeliest information available</li> <li>○ Timeliness</li> </ul>	<ul style="list-style-type: none"> <li>○ Censorship or other motivations limit promulgation of military related information</li> <li>○ Deception is possible</li> <li>○ Translations may be needed, which often causes a delay in using the information</li> <li>○ Significant information may be overlooked in the high volume of material to be processed</li> </ul>
<b>Measurement and Signature Intelligence (MASINT)</b>	<ul style="list-style-type: none"> <li>○ Can provide cues for other collection sensors or strike systems</li> <li>○ Potential for near instantaneous display capability exists</li> <li>○ Information can be obtained from the periphery of areas of interest</li> <li>○ Because it works in different parts of the electromagnetic spectrum, MASINT detects information patterns not previously exploited by other sensors</li> </ul>	<ul style="list-style-type: none"> <li>○ Sources and information are technical and difficult to use</li> <li>○ Subject to deception</li> <li>○ Full exploitation is costly, requires extensive support facilities, and may require near continuous coverage and extensive coordination among participants</li> <li>○ Source locations may be imprecise</li> </ul>

Each of the sources highlighted in the table above provides one piece of the operational puzzle. While each is useful in its own right, the effectiveness of each source grows when combined with others. During the Cuban Missile Crisis, a U.S. reconnaissance

flight over Cuba discovered the existence of Soviet missiles on the island that were capable of striking the United States.<sup>53</sup> If it were not for the HUMINT provided to the U.S. by Oleg Penkovsky, a colonel in Soviet military intelligence, the U.S. would have likely begun preparations for war with the Soviets.<sup>54</sup> Fortunately, Penkovsky's vital intelligence informed President John F. Kennedy of the inferiority of the Soviet missile program and the amount of time it would have taken for the Soviets to prepare their missiles in Cuba. This intelligence afforded Kennedy enough time to pursue a diplomatic solution rather than a military one. Russia eventually removed the missiles from Cuba in exchange for concessions from the United States.<sup>55</sup> HUMINT, in this case, helped to highlight the true capabilities, intentions, and context behind the Soviet missiles in Cuba in a way that imagery intelligence (IMINT) from the surveillance plane could not provide. The collaboration of these intelligence sources likely prevented a much more disastrous result.

In contrast, a lack of IMINT could also have similarly catastrophic consequences. For example, the CIA could be interrogating an operative of a terrorist group that the U.S. is tracking. After several days of interrogation, the individual could finally give up the location where his fellow group members are hiding. When this piece of information is verified using IMINT and SIGINT records centered on the location mentioned by the operative, it could be determined that the location is, in fact, a hospital. If the CIA relied only upon the HUMINT gathered from their interrogation for a drone strike on the terrorist group, there would be significant consequences if, for example, it led to an attack on such a facility.

Within the field of counterterrorism, hostiles often avoid open communications that could be infiltrated by SIGINT techniques and it is often difficult to infiltrate terrorist groups using traditional HUMINT methods.<sup>56</sup> Measurement and Signature Intelligence (MASINT) has often been used in the targeting and subsequent killing of suspected terrorists. The FBI defines MASINT as a collection discipline that is related to "weapons capabilities and industrial activities. MASINT includes the advanced processing and use of data gathered from overhead and airborne IMINT and SIGINT collection systems."<sup>57</sup> The U.S. has controversially used MASINT to target and kill individuals not for what they have said or done, but rather through predetermined "signatures" that purportedly indicate that the targeted individuals are involved in terrorist plots or militant activities (i.e. a group of young men standing together with guns).<sup>58</sup> Without being combined with other sources of intelligence, MASINT also has the ability to deceive and distort reality. As a whole, all-source intelligence is useful for filling the gaps that are left by utilizing only one or two sources of intelligence.

These issues of intelligence are multiplied when the U.S. has to rely on targeting information from a host nation in order to carry out a strike. Rosa Brooks and John Abizaid highlight the problems associated with this:

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<sup>53</sup> Turner, *Historical Dictionary of United States Intelligence*, 46.

<sup>54</sup> "The Capture and Execution," April 30, 2013.

<sup>55</sup> Margolis, "The Lack of HUMINT," 52.

<sup>56</sup> *Ibid.*, 50.

<sup>57</sup> FBI, "Intelligence Collection Disciplines."

<sup>58</sup> Margolis, "The Lack of HUMINT," 50.

Reliance on intelligence and other targeting information provided by a host nation government adds an extra layer of uncertainty. In such contexts — when it is already so difficult to articulate clear criteria for determining what law applies, and to whom — we face the additional challenge of ensuring that we are not being drawn into a civil war, or being used to target the domestic political enemies of the host state leadership.<sup>59</sup>

It is often difficult enough to verify the intelligence of one's own agencies, let alone the intelligence of a foreign state whose intentions or loyalties may not be clear. The best intelligence is acquired when collectors and analysts engage in what Jennifer Sims calls “all-source data fusion,” which involves corroborating information using multiple sources and methods to derive a complete picture of a target or mission.<sup>60</sup>

## A Challenging Environment

In any given situation, developing a complete picture of a target or of a theater of operation is challenging, if not impossible. While intelligence helps to reduce uncertainties, it rarely allows for 100 percent confidence.<sup>61</sup> It is unlikely that the CIA knows the exact next move of Vladimir Putin in Crimea or where the next terrorist attack in the U.S. will take place because, in the words of former U.S. Secretary of Defense Donald Rumsfeld, there are many “known unknowns” and “unknown unknowns” in the intelligence world.<sup>62</sup> This truth is perhaps no more relevant than in the case of gathering targeting intelligence for highly classified kill missions. Armin Krishnan highlights the challenging nature of targeting wanted terrorists in states that the targeting nation is not actively engaged in:

Characteristic for them is that enemies do not wear uniforms and hide within a population to indirectly attack their opponents when they have an advantage. For the most part, state forces fighting these new adversaries do not see their opponents, who rely on improvised explosive devices (IEDs), terrorist attacks, political propaganda, and other means of subverting the efforts of the local government or international intervention forces. The new adversaries do not tend to have major weapons systems, important bases, or factories. They do not offer any valuable targets apart from their own lives. Terrorists may have training camps in remote parts of the world, but these camps can be easily moved and are little more than tent camps. They operate within cities and other settlements, which makes it impossible to use massive force, as international humanitarian law requires that harm to the civilian population be minimized.<sup>63</sup>

Krishnan's description of the “changing nature of war” underlines the challenges that the CIA and the U.S. government face when targeting and killing enemies abroad while limiting damage to the intended targets alone. While this does not mean that the U.S.

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<sup>59</sup> Abizaid and Brooks, “Stimson Task Force,” 35.

<sup>60</sup> Sims, “The Importance of All-source Fusion,” 42.

<sup>61</sup> Coyne, “Understanding the Limits of Intelligence,” July 12, 2016.

<sup>62</sup> Graham, “Rumsfeld's Knowns and Unknowns,” March 27, 2014.

<sup>63</sup> Krishnan, “Targeting Individuals,” 284.

government should not be challenged in how they collect and act upon intelligence, nor does it excuse it for the numerous times that their failures resulted in significant collateral damage, it does mean that targeting intelligence is a difficult and imperfect exercise that requires consistent improvement.

## Improvements Moving Forward

Since this paper determined that targeting intelligence is indeed challenging, what can the U.S. reasonably do to improve the methods by which they gather and analyze intelligence, as well as to improve the legal framework for targeted killings in order to reduce the risk of civilian and collateral damage?

### *All Source Fusion and Intelligence*

While the Somalia and Yemen cases may not be representative of the targeted killings program as a whole, the fact that there are cases at all where signals intelligence make up the bulk of a targeting package is cause for concern. Christine Fair states that, “Signals intelligence alone is not quality intelligence. Whether you are using that for a sniper, a drone, or a conventional air strike, it doesn’t matter how you’re eliminating that person.”<sup>64</sup> The same could also be said for other sources of intelligence. Over the past several decades, there has been an overreliance on technical intelligence, or TECHINT (SIGINT, IMINT, MASINT) at the expense of HUMINT.<sup>65</sup> While TECHINT provides valuable and critical information, the conclusions gained from it are not sufficient for carrying out a mission as consequential as a targeted killing. It is evident that HUMINT needs to play a more significant role in targeting packages. “All source data fusion,” as it is referred to by Sims, is the only way to effectively corroborate intelligence in a way that limits civilian casualties.<sup>66</sup> While collecting and analyzing multiple sources of intelligence is expensive and tedious, when civilian lives are at stake, expediency and frugality should not be part of the considerations that determine how much intelligence to gather and analyze.

### *More Surveillance Coverage*

Although this paper previously mentions cases where the use of UAVs resulted in surveillance “blinks,” UAVs actually have the capacity to be more effective for targeting surveillance than manned aircraft: they have a lower profile, better fuel efficiency, and do not have the same constraints of pilot fatigue.<sup>67</sup> If the U.S. can eliminate the “tyranny of distance” (UAVs spending half of their flight time in transit) by ensuring that there are UAV bases within closer proximity of their targets, UAVs will be afforded more “time on target,” leading to potentially better intelligence and fewer civilian deaths.<sup>68</sup>

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<sup>64</sup> Pearson, “The Problem,” October 15, 2015.

<sup>65</sup> Margolis, “The Lack of HUMINT,” 50.

<sup>66</sup> Sims, “The Importance of All-source Fusion,” 42.

<sup>67</sup> Abizaid and Brooks, “Stimson Task Force,” 18.

<sup>68</sup> Ibid.

### *Improving the Legal Framework*

As mentioned previously, it is unlikely that there will be international consensus on the use of targeted drone killings in the short term and it is likely that the practice will continue for the foreseeable future. Despite this, the U.S. should work to develop clear legal guidelines to minimize civilian casualties. Blum and Heymann set out five clear guidelines that offer a starting point to placing targeted killings on a better legal framework, while at the same time limiting civilian casualties.<sup>69</sup> First they argue that targeted killings should not be carried out if the host country is willing to take action to mitigate the perceived threat. The second recommendation involves only targeting those that are directly involved in terrorist activities and are a legitimate threat to the U.S. instead of targeting every member of a terrorist group. Poor intelligence is not necessarily the issue in all cases, but rather the U.S.' broad definition of who is a combatant. The third point they mention corroborates the information in the above section on the need to build a system of intelligence that is based on a wide range of sources to ensure proper identification of targets. The final points they make are that innocent civilians should be compensated when harmed by the U.S. government and that targeted killing tactics be used only out of necessity. By setting out a clear legal framework for the CIA and the U.S. military in regards to targeted drone strikes, the U.S. is likely to reduce the amount of harm done to innocent civilians.

### *Expanding Transparency*

Greater transparency about the U.S. targeted killing program may also aid in reducing civilian casualties. The CIA and U.S. military work with targeting lists that are derived from "undisclosed intelligence applied against secret criteria."<sup>70</sup> By using signature strikes and having few human sources on the ground to verify the results of a strike, it is likely that the U.S. itself does not always know who it is killing.<sup>71</sup> Christine Fair rightfully asks, if the U.S. "cannot positively identify who has been killed in any given signature strike, how can the CIA assess the degree to which this strike advanced US interests?"<sup>72</sup> Daniel Brunstetter and Megan Braun similarly state that "without greater transparency, there is no way to know why a specific strike was undertaken, if it was undertaken with discrimination and proportionality in mind, or even whether it reflected military necessity."<sup>73</sup>

Another concern over the past couple years has been the expansion of the list of individuals deemed to be legitimate targets of the U.S. program. In the early stages of drone warfare, only the most notable terrorist leaders were targeted, but in recent years, low level members and even criminal leaders with no affiliation to terrorism have become targets.<sup>74</sup> This brings an even greater challenge to the U.S.' justification of the program under the "just war" principle. In this regard, the question becomes less about how to improve intelligence and more about who should be targeted under the U.S. program.

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<sup>69</sup> Blum and Heymann, "Law and Policy," 169.

<sup>70</sup> Alston, "The CIA and Targeted Killings," 285.

<sup>71</sup> Fair, "Second-class Citizenship in Pakistan," 223.

<sup>72</sup> *Ibid.*, 229.

<sup>73</sup> Brunstetter and Braun, "The Implications of Drones," 354.

<sup>74</sup> Mayer, "The Predator War," October 26, 2009.

But under the guise of secrecy and limited transparency, there can be no open in-depth discussion on determining who, if any, should be the target of strikes, whether the practice of targeted killings is lawful, and how to improve the current intelligence criteria for targeted kill missions. If greater transparency were implemented, the CIA and the U.S. military would also be better able to clarify their rationale for carrying out strikes and perhaps nullify misinterpretations and exaggerations made about the targeted killings program. Without these discussions, there will be limited change to the requirements needed to carry out a strike, which will likely lead to more civilian casualties at the hands of the U.S. targeted killings program.

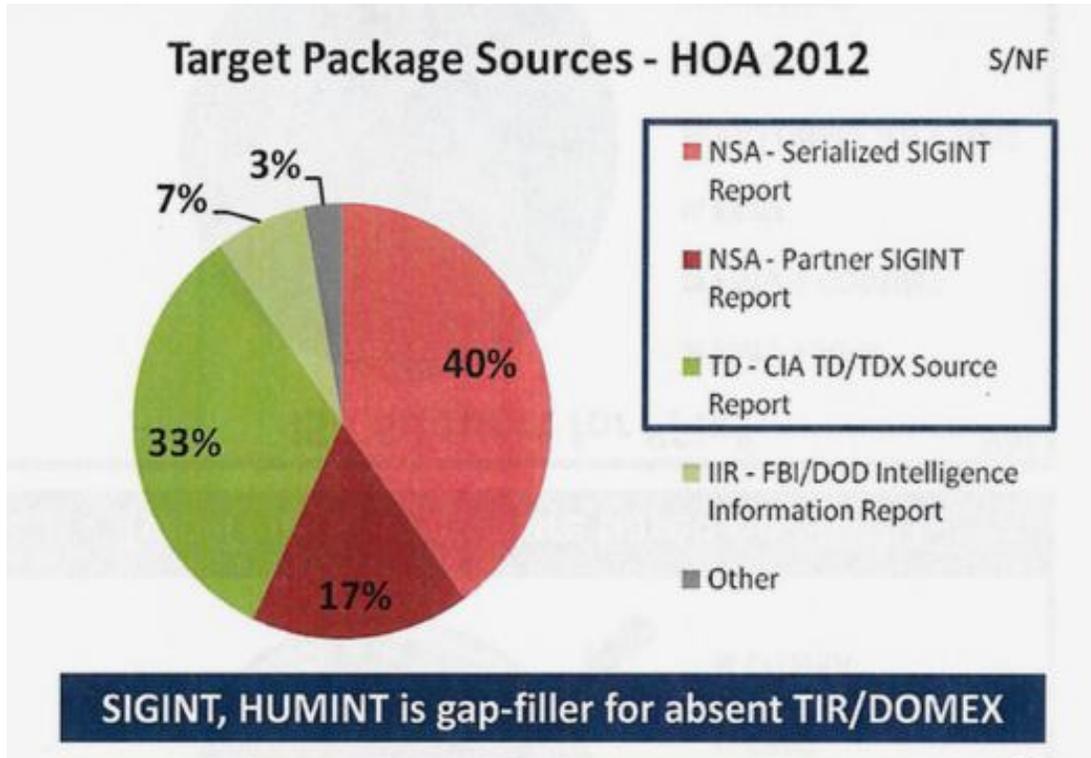
## Conclusion

As American leaders continue to look for innovative ways to “reduce the destructive effects of warfare,” targeted killings will likely continue being a prevalent part of American foreign policy.<sup>75</sup> As technology continues to evolve in the context of war, the demand for greater precision and limited collateral damage is likely to continue to grow. Collecting and analyzing intelligence for the purpose of targeting is a demanding activity that requires significant resources, time, and commitment. Even when these factors are added, intelligence in any given situation will be constantly imperfect, leading to constantly imperfect decisions. While it should not be expected that U.S. intelligence agencies, such as the CIA, be flawless given their challenging operating environment, there is significant room for improvement that could potentially lower the amount of civilian casualties from the U.S.’ targeted killings program. Expanding all-source intelligence from many intelligence disciplines and sources (HUMINT, SIGINT, IMINT, MASINT, etc.), will help reduce the amount of uncertainty that comes from relying on one or two sources, which in turn will limit collateral damage. TECHINT alone is insufficient for creating in-depth targeting packages. If the U.S. ensures that there are UAV bases within closer proximity of their targets and offer more resources to the program, UAVs will be afforded more “time on target” rather than in transit, potentially leading to fewer civilian casualties. Targeting intelligence will always be imperfect by nature and there should be an understanding that occasionally the U.S. intelligence community will fail in their assessments, leading to unfavorable outcomes. Regardless of this reality, moderate investments into how the community collects and analyzes intelligence for targeting purposes will likely lead to a decrease in such unfortunate occurrences. Greater transparency will allow for discussion on whether the current thresholds for carrying out a strike are sufficient for reducing civilian casualties. Finally, establishing a clear legal framework makes it easier to determine the threshold for carrying out strikes, distinguish between a civilian and an enemy combatant, define the intelligence requirements necessary for carrying out a strike, and answer other crucial questions. By addressing both the legal and tactical aspects of targeting, the U.S. will be better poised to reduce civilian casualties.

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<sup>75</sup> Zehfuss, “Targeting,” 544.

## Appendix 1: Target Package Sources in Yemen and Somalia (2011-2012)<sup>76</sup>



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