

“MISTAKES” IN WAR

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In 2015, the United States military dropped a bomb on a hospital in Afghanistan run by Médecins Sans Frontières, killing forty-two staff and patients. Testifying afterwards before a Senate Committee, General John F. Campbell explained that “[t]he hospital was mistakenly struck.” In 2019, while providing air support to partner forces under attack by ISIS, the U.S. military killed dozens of women and children. Central Command concluded that any civilian deaths “were accidental.” In August 2021, during a rushed withdrawal from Afghanistan, the U.S. military executed a drone strike in Kabul that killed ten civilians, including an aid worker for a U.S. charity and seven children in his family. The Pentagon later admitted it was a “tragic mistake.” In these cases and others like them, no one set out to kill the civilians who died. Such events are usually chalked up as sad but inevitable consequences of war—as regrettable “mistakes.”

This Article examines the law on “mistakes” in war. It asks: Under international humanitarian law, intentionally killing a civilian is a war crime, but is killing a civilian by mistake ever a crime? It considers whether and when the law holds not just individuals, but also states, responsible for “mistakes.” To see how the law works, or fails to work, in practice, the Article examines the U.S. military’s own assessments of civilian casualties. The analysis focuses on the United States, both because of its global military operations and because of the power of its example to shape global practices. It demonstrates that “mistakes” in the U.S. counterterrorism campaign are far more common than generally acknowledged. Some errors are, moreover, the predictable—and avoidable—result of a system that does little to learn from its mistakes. The United States is far from alone, thus lessons learned from its failures can be instructive for other states as well.

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INTRODUCTION

In October 2015, the United States Air Force gunship conducted airstrikes on a hospital in Kunduz, Afghanistan, run by the Nobel Peace Prize-winning medical group Médecins Sans Frontières (MSF). Forty-two MSF staff and patients were killed in the attack, and dozens more were injured.¹ Testifying later before the Senate Armed Services Committee, General John F. Campbell explained that the strike was a mistake: “The hospital was mistakenly struck. We would never intentionally target a protected medical facility.”² The U.S. military disciplined sixteen service members involved in the bombing, but it came to the conclusion that no war crime had been committed, calling it a “tragic accident.”³

In 2019, the Syrian Democratic Forces (SDF) came under attack by ISIS forces in northern Syria. The SDF requested that the United States provide air support. The U.S. Ground Force Commander (GFC) “received confirmation that no civilians were in the strike areas, and authorized supporting aerial strikes.”⁴

¹ Françoise Bouchet-Saulnier & Jonathan Whittall, *An Environment Conducive to Mistakes? Lessons Learnt from the Attack on the Médecins Sans Frontières Hospital in Kunduz, Afghanistan*, 100 INT’L REV. RED CROSS 337 (2018), https://international-review.icrc.org/sites/default/files/reviews-pdf/2019-10/100_17.pdf.

² Deb Riechmann, *Airstrike on Kunduz Hospital a Mistake, U.S. Commander Says*, PBS NEWSHOUR (Oct. 6, 2015), <https://www.pbs.org/newshour/world/airstrike-kunduz-hospital-mistake-u-s-commander-says>.

³ CENTCOM Releases Investigation Into Airstrike on Doctors Without Borders Trauma Center, U.S. CENT. COMMAND (Apr. 29, 2016), <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/904574/april-29-centcom-releases-investigation-into-airstrike-on-doctors-without-borde/>. Commentators widely criticized that decision. See, e.g., Alex Whiting, *Recklessness, War Crimes, and the Kunduz Hospital Bombing*, JUST SEC. (May 2, 2016), <https://www.justsecurity.org/30871/recklessness-war-crimes-kunduz-hospital-bombing/>; Sarah Knuckey, Anjali Parrin & Keerthana Nimmala, *US Government Concludes No “War Crimes” in Kunduz Strike, but Fails to Explain Why*, JUST SEC. (Apr. 29, 2016), <https://www.justsecurity.org/30831/government-concludes-war-crimes-kunduz-strike-fails-explain/>.

⁴ Michael X. Garrett, Memorandum for Secretary of Defense, *Executive Summary: Review of the Civilian Casualty Incident that Occurred on 18 March 2019 in Baghuz, Syria*, U.S. DEP’T OF DEF. (May 11, 2022),

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But the confirmation was wrong. “Unbeknownst to the GFC, civilians were within the blast radius resulting in CIVCAS [civilian casualties].”⁵ After the strike, an analyst wrote on a secure chat system, “Who dropped that?” Another responded, “We just dropped on 50 women and children.”⁶ The ground unit that ordered the strike also performed the civilian casualty assessment afterwards. When the incident came to light two years later, Central Command said the strikes had killed sixteen fighters and four civilians. Another sixty confirmed dead were not classified as civilians by the military, the *New York Times* reported, “in part because women and children in the Islamic States sometimes took up arms.” Central Command determined the bombing was lawful and any civilian deaths “were accidental.”⁷

Tragedy struck yet again in August 2021. As the U.S. military executed a rushed and chaotic withdrawal from Afghanistan, it executed a drone strike in Kabul intended to target an ISIS-K facilitator driving a vehicle with explosive materials, but which it would later admit instead killed ten civilians, including an aid worker for a U.S. charity who was driving the car, and seven children in his family.⁸ A group of twenty-one NGOs issued a letter to Secretary of Defense Lloyd Austin stating that the strike and the strike at Baghuz “illustrate an unacceptable failure to prioritize civilian protection in the use of lethal force; meaningfully investigate, acknowledge, and provide amends when harm occurs; and

<https://media.defense.gov/2022/May/17/2002999192/-1/-1/1/EXECUTIVE-SUMMARY-INDEPENDENT-REVIEW-OF-18-MARCH-2019-CIVILIAN-CASUALTY-INCIDENT-IN-BAGHUZ-SYRIA.PDF>.

⁵ *Id.*

⁶ Dave Philipps and Eric Schmitt, *How the U.S. Hid an Airstrike That Killed Dozens of Civilians in Syria*, N.Y. TIMES (Nov. 13, 2021), <https://www.nytimes.com/2021/11/13/us/us-airstrikes-civilian-deaths.html>.

⁷ *Id.*

⁸ Azmat Khan, *Military Investigation Reveals How the U.S. Botched a Drone Strike in Kabul*, N.Y. TIMES (Jan. 6, 2023), <https://www.nytimes.com/2023/01/06/us/politics/drone-civilian-deaths-afghanistan.html>. <https://www.nytimes.com/2023/01/06/us/politics/drone-civilian-deaths-afghanistan.html>

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provide accountability in the event of wrongdoing.”⁹ The Pentagon later called it a “tragic mistake.”¹⁰

Each of the events outlined above was a tragedy. And each was ultimately found to be a result of an error, often characterized as a “mistake.”¹¹ It appears no one set out to kill the doctors, patients, women, and children who died. In these cases and others like them, no one is generally held responsible. The incidents are usually chalked up as the sad but inevitable consequence of war. But these individual events are not just individual events. When one looks at the overall picture, a pattern begins to emerge: Errors of this kind are far more common than are generally acknowledged. Some errors are, moreover, the predictable result of a system that does too little to learn from its mistakes.¹²

This Article examines the state of the law on “mistakes” in war. It finds that while those responsible for mistakes are often not held accountable, there is significant evidence that certain mistakes can be treated as criminally culpable. The Article excavates the human cost of these “mistakes,” relying on evidence gathered in the course of one of the authors’ award-

⁹ Airwars et al., *NGO Letter to US Secretary of Defense Demands Accountability and Reform After 20 Years of Civilian Harm*, CTR. FOR CIVILIANS IN CONFLICT (Dec. 1, 2021), <https://civiliansinconflict.org/press-releases/ngos-demand-reform/>.

¹⁰ Matthieu Aikins & Alissa J. Rubin, *First Tied to ISIS, Then to U.S.: Family in Drone Strike is Tarnished Twice*, N.Y. TIMES (Sept. 18, 2021), <https://www.nytimes.com/2021/09/18/world/asia/afghanistan-drone-strike-reaction.html>.

¹¹ Charles Perrow wrote of “normal accidents,” sometimes called “system accidents.” He argued that such accidents are inevitable in extremely complex systems. His work and the work he inspired highlighted organizational and management factors as the main causes of failures. In that sense, these “mistakes” might be termed “normal accidents,” though we argue that they are not inevitable or irremediable. See CHARLES PERROW, *NORMAL ACCIDENTS: LIVING WITH HIGH-RISK TECHNOLOGIES* (1984).

¹² Neta Crawford describes how “collateral damage” is often portrayed as “natural and framed as inevitable and certainly not the result of deliberate choices by individuals.” NETA CRAWFORD, *ACCOUNTABILITY FOR KILLING: MORAL RESPONSIBILITY FOR COLLATERAL DAMAGE IN AMERICA’S POST-9/11 WARS* 40 (2013). She argues that this framing is wrong: “When collateral damage occurs with great frequency in ways that are predictable and often predicted, we can no longer be surprised and say that such harm was unforeseen.” *Id.* at 41.

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winning reporting on the U.S. air war’s human toll.¹³ It digs into the military’s own confidential assessments of more than 1,300 reports of civilian casualties to see when and how the military examined reports of civilian casualties and how it responded to those reports. In the process, it asks what responsibility militaries have under international law to minimize “mistakes.” At what point does a mere mistake become a crime for which an individual should be held responsible for a violation of a state’s duty to ensure respect for the Geneva Conventions? And when mistakes repeatedly recur, what obligation do states have to ensure that system-level changes are made?¹⁴

To be clear, there is no international law of “mistakes” as such. We use the term here because so often when strikes kill civilians, particularly when the number of civilians killed is not justified by the military objective achieved, the government responsible calls it a “mistake” or uses a similar term, such as “tragedy” or “accident,” to describe it. When it does so, it is often in an effort to minimize the failures involved and thus avoid accountability. By using the term in this Article, we mean not to adopt the minimization of “mistakes” but instead resist it. We show that calling an event a “mistake” does not absolve those involved of responsibility; a “mistake,” we show, can be a war crime under existing law. We show, too, that “mistakes” are

¹³ Azmat Khan’s multi-part series in the *New York Times*, “The Civilian Casualty Files,” was awarded the 2022 Pulitzer Prize in International Reporting. The project was the culmination of more than five years of reporting, including ground investigation at the sites of more than 100 civilian casualty incidents in Iraq, Syria, and Afghanistan, more than 1,300 formerly secret military records she obtained through FOIA lawsuits against the Pentagon, and scores of interviews with military and local sources. Azmat Khan et al., *The Civilian Casualty Files*, N.Y. TIMES (Dec. 18, 2021), <https://www.nytimes.com/interactive/2021/us/civilian-casualty-files.html>. This Article relies on much of the information gathered as part of that reporting, as well as previously unreported information.

¹⁴ While this Article does not address the question of legal responsibility for artificial intelligence (AI) systems in war, its consideration of intent and systemic errors in international humanitarian law has implications for that emerging issue. If the use of AI systems in war results in mistakes, is there a legal responsibility to detect those errors and fix those systems? Even if the person who sets up a system does not intend to kill civilians unnecessarily, if it does so, are they then under some legal obligation to remedy the situation?

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often the result of identifiable and predictable systemic failures rather than unpredictable one-off events.

The problems explored in this Article are certainly not limited to the United States. We nonetheless focus on the United States for several reasons: The United States has the most significant global military presence of any country in the world. Since the attacks on September 11, 2001, it has carried out global military operations and has pioneered the use of remotely piloted aircraft in warfare. It has, moreover, trained militaries around the world, and its actions often set the bar against which others are measured. If the United States acknowledges and addresses a problem, that can have an impact not only in the United States but around the world. There is also a simple practical reason for our focus: We have access to previously secret U.S. military records that provide an unparalleled look at how a modern military manages reports of civilian casualties.

Part I of this Article examines the law governing mistakes in war. Under international humanitarian law, intentionally killing a civilian is a war crime, but is killing a civilian by mistake ever a crime? Part II considers whether and when the Geneva Conventions hold not just individuals, but also states, responsible for “mistakes.” Part III examines the U.S. military’s assessments of civilian casualties, data that underlies award-winning journalism on the costs of war. In the process, it demonstrates that “mistakes” in the U.S. counterterrorism campaign are often not simply one-off errors, but the result of systemic failures.

Part IV considers whether the repeated errors that these reports reveal—not just one mistake, but an unmistakable pattern of mistakes—might violate international humanitarian law.¹⁵ It argues for systemic reforms to respond to systemic errors, both through changes to U.S. targeting practices and through reform to the law of armed conflict. It argues that expanding individual criminal liability for perpetrators, even if they can be identified, will not reduce errors based on faulty systems. The more effective approach would be to emphasize the legal obligation of states to correct systems that lead to repeated, and thus avoidable, “mistakes” in war.

¹⁵ To respect the boundaries of her role as a journalist, Khan did not contribute to this Part of the Article.

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I. INDIVIDUAL CRIMINAL RESPONSIBILITY FOR “MISTAKES”

Here we examine the current state of the debate on “mistakes” in war. First, we examine the case law. We show that, while they have not been entirely consistent, several international courts have found criminal intent where there is recklessness (*dolus eventualis*)—which can encompass some, but not all, strikes that have been dismissed as “mistakes.” Second, we examine the scholarship on “mistakes” in war, which is, so far, quite limited. The most robust discussions of the topic tend to happen in learned blog posts that are written in the days and weeks following each significant event. A review of that scholarship reveals that there is a growing contingent of scholars who agree that the law may provide accountability for mistakes—in the form of accountability for “recklessness.”

A. The Legal Framework

International Humanitarian Law (IHL)—the law that governs the conduct of armed conflict—requires that members of a military distinguish between civilians and combatants, prohibiting them from intentionally targeting civilians, or engaging in indiscriminate attacks,¹⁶ under a principle known as “distinction.” The law acknowledges that some civilians may be killed during armed conflict, but it requires that any loss of life not be “excessive in relation to the concrete and direct military advantage anticipated”¹⁷—a principle known as “proportionality.” These are two of the most foundational principles of the law that governs armed conflict and central to

¹⁶ For an overview of the law on indiscriminate attacks, see Laurent Gisel, *The Use of Explosive Weapons in Densely Populated Areas and the Prohibition of Indiscriminate Attacks*, INT’L COMM. OF THE RED CROSS (Sept. 6, 2014), <https://www.icrc.org/en/document/use-explosive-weapons-densely-populated-areas-and-prohibition-indiscriminate-attacks>.

¹⁷ 1 JEAN-MARIE HENCKAERTS & LOUISE DOSWALD-BECK, CUSTOMARY INTERNATIONAL HUMANITARIAN LAW 46 (2005), [hereinafter ICRC CIL STUDY], <http://www.icrc.org/en/doc/assets/files/other/customary-international-humanitarian-law-i-icrc-eng.pdf>. See also Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), arts. 51.5(b), 57.2(a)(iii), 57.2(b), June 8, 1977, 1125 U.N.T.S. 3 [hereinafter Additional Protocol I].

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the effort to reduce unnecessary suffering in war by insulating civilians as much as possible from the killing and destruction.

A war crime is a serious breach of IHL—that is, the law that governs the conduct of armed conflict.¹⁸ Whether a breach of IHL has taken place is determined by examining the relevant treaties, including the Geneva Conventions, or customary law, or both.¹⁹ In order for an act to be a war crime, there must be a “nexus” between the conduct at issue and the relevant armed conflict.²⁰ Moreover, in order for an IHL violation to be a crime, *mens rea* (literally “guilty mind”) must be present. It is this final factor—*mens rea*—that is at issue when it comes to mistakes in war.

Across legal systems—both international and domestic—different crimes require different levels of *mens rea*. In the United States, for example, the Model Penal Code (MPC)²¹ defines four levels of *mens rea*: (1) purposely, (2) knowingly, (3) recklessly, and (4) negligently.²² There are roughly corresponding civil-law concepts of fault (*Vorsatz*): *dolus directus* of a first degree (purpose), *dolus directus* of a second

¹⁸ Oona A. Hathaway, Paul K. Strauch, Beatrice A. Walton & Zoe A. Y. Weinberg, *What is a War Crime?*, 44 YALE J. INT’L L. 53, 82 (2019); ICRC CIL STUDY, *supra* note 19, at 568.

¹⁹ *See, e.g.*, Prosecutor v. Galić, Case No. IT-98-29-T, Trial Chamber Judgment, ¶ 85 (Int’l Crim. Trib. for the Former Yugoslavia Dec. 5, 2003), <http://www.icty.org/x/cases/galic/tjug/en/gal-tj031205e.pdf> [hereinafter Galić Trial Chamber Judgment] (“[W]hile binding conventional law that prohibits conduct and provides for individual criminal responsibility could provide the basis for the International Tribunal’s jurisdiction, in practice the International Tribunal always ascertains that the treaty provision in question is also declaratory of custom.”).

²⁰ *See, e.g.*, Guénaél Mettraux, *Nexus with Armed Conflict*, in THE OXFORD COMPANION TO INTERNATIONAL CRIMINAL JUSTICE 435-36 (Antonio Cassese ed., 2009) (explaining that nexus “serves to distinguish war crimes from purely domestic crimes over which international criminal courts and tribunals have no jurisdiction”). According to Cassese, nexus “serves to distinguish between war crimes, on the one side, and ‘ordinary’ criminal conduct that therefore falls under the law applicable in the relevant territory.” ANTONIO CASSESE, INTERNATIONAL CRIMINAL LAW 77 (3d ed. 2013).

²¹ Although not adopted in its entirety by any state in the United States, the Model Penal Code provides a rough approximation for U.S. practice in criminal law.

²² MODEL PENAL CODE § 2.02 (AM. L. INST. 1962), <https://opencasebook.org/casebooks/3553-balloberman-crim-law-casebook/resources/4.3-model-penal-code-on-intent-202-203/>.

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degree (sometimes also called *dolus indirectus*) (knowledge), *dolus eventualis* (recklessness).²³ Some crimes require the highest level of mens rea, purpose (*dolus directus*), while others may only require recklessness or negligence.

To establish an international crime, it is necessary to establish not simply that the perpetrator committed the act, but also that the perpetrator had the necessary mens rea. The International Criminal Tribunal for the Former Yugoslavia (ICTY) put it this way: “It is apparent that it is a general principle of law that the establishment of criminal culpability requires an analysis of two aspects. The first of these may be termed the actus reus—the physical act necessary for the offence. . . . The second aspect . . . relates to the necessary mental element, or mens rea.”²⁴ But there is no consistent intent requirement in international criminal law, even for the same crimes. The difficulty is compounded by the application of both common law and civil law standards. As one scholarly source puts it, “The copious mens rea standards employed in the jurisprudence include, among others, *dolus directus*, *dolus indirectus*, *dolus eventualis*, recklessness, deliberation, wantonness, willfulness etc.”²⁵

We do not aim to solve this dilemma, which will likely be addressed over time by international criminal tribunals. What we do instead is examine the position of the ICRC and the relevant international case law. Despite some incoherence in the case law, we find significant support for individual criminal responsibility for violations of international humanitarian law in cases of recklessness (*dolus eventualis*)—which corresponds to what might sometimes be colloquially referred to as a “mistake.”

²³ CASSESE’S INTERNATIONAL CRIMINAL LAW 37–58, 75–77 (Antonio Cassese et al., 3d ed. 2013); Brian L. Cox, *Recklessness, Intent, and War Crimes: Refining the Legal Standard and Clarifying the Role of International Criminal Tribunals as a Source of Customary International Law*, 52 GEO. J. OF INT’L L. 1, 59-60 (2020).

²⁴ Prosecutor v. Mucić et al., Case No. IT-96-21-T, Trial Chamber Judgment, ¶¶ 424 et seq. (Int’l Crim. Trib. for the Former Yugoslavia Nov. 16, 1998).

²⁵ IRYNA MARCHUK, THE FUNDAMENTAL CONCEPT OF CRIME IN INTERNATIONAL CRIMINAL LAW: A COMPARATIVE LAW ANALYSIS 117 (2014).

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B. International Committee of the Red Cross

The ICRC describes itself as an “impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance.”²⁶ Article 5 of the Statutes of the International Red Cross and Red Crescent Movement states that the role of the ICRC is “to undertake the tasks incumbent upon it under the Geneva Conventions, to work for the faithful application of international humanitarian law applicable in armed conflicts and to take cognizance of any complaints based on alleged breaches of that law” and “to work for the understanding and dissemination of knowledge of international humanitarian law applicable in armed conflicts and to prepare any development thereof.”²⁷ While not all states accept it as an authoritative interpreter of international humanitarian law, it is widely regarded as an influential voice in the field.

It is telling, then, that the ICRC has repeatedly, and over the course of several decades, stated that the appropriate mens rea for the most significant war crimes includes recklessness. Additional Protocol I Art. 85(3) outlines actions that constitute grave breaches when committed “wilfully.”²⁸ Those actions include “making the civilian population or individual civilians the object of attack.”²⁹ In its 1977 Commentary on the Protocol, the ICRC explains that “wilfully” includes “the concepts of ‘wrongful intent’ or ‘recklessness’, viz., the attitude of an agent who, without being certain of a particular result, accepts the possibility of it happening.”³⁰ Article 50 of Geneva Convention I

²⁶ *Who We Are*, INT’L COM. OF THE RED CROSS, <https://www.icrc.org/en/who-we-are>.

²⁷ Statutes of the International Red Cross and Red Crescent Movement, art 5.2(c) & 5.2(g).

²⁸ Additional Protocol I, *supra* note 19, art. 8(3).

²⁹ *Id.* art. 85(3)(a).

³⁰ Int’l Comm. of the Red Cross, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, ¶ 3474 (Yves Sandoz, Christophe Swinarski & Bruno Zimmermann eds., 1987), <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-85/commentary/1987>; *see also* Prosecutor v. Taylor, SCSL-03-01-A, Appeals Chamber Judgment, ¶ 416 n. 1289 (Special Ct. for Sierra Leone Sept. 26, 2013) (citing the ICRC commentary favorably and relying on it); UK Law of

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similarly defines grave breaches to include “wilful killing, torture, inhumane treatment . . . willfully causing great suffering or serious injury to body or health, and extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.”³¹ The 2016 ICRC Commentary on Article 50 notes, first, that “The Geneva Conventions are silent as to the requisite degree of *mens rea* attached to most grave breaches . . . leav[ing] it to State Parties to determine the requisite mental element attached to them.”³² But it then notes that “from the wording of Article 50 itself, two important points can be noted and should be implemented in national legislation. The use of the term ‘wilful’ indicates, at least for the crimes of killing and causing great suffering or serious injury to body or health, that either intentional or reckless conduct will engage the responsibility of the perpetrator.”³³

The recent ICRC Customary International Law Study similarly includes recklessness as a culpable *mens rea* for war crimes. It states: “International case-law has indicated that war crimes are violations that are committed wilfully, i.e., either intentionally (*dolus directus*) or recklessly (*dolus eventualis*). The exact mental element varies depending on the crime concerned.”³⁴

Accordingly, the ICRC’s position on the question is consistent and well-established: a person who acts recklessly in killing civilians disproportionately to the military purpose

Armed Conflict Manual § 16.39.1 (2004) (citing the ICRC language favorably), <https://ihl-databases.icrc.org/en/customary-ihl/v2/rule156>.

³¹ Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field art. 49, Aug. 12, 1949, 6 U.S.T. 3114, 75 U.N.T.S. 31 [hereinafter Geneva Convention I].

³² Int’l Comm. of the Red Cross, *Commentary of 2016*, art. 50, ¶ 2932 (2016), <https://ihl-databases.icrc.org/en/ihl-treaties/gci-1949/article-50/commentary/2016>.

³³ *Id.* ¶ 2933. The ICRC has come to a similar position in other contexts. See, e.g., Int’l Comm. of the Red Cross, Preparatory Commission for the International Criminal Court, Doc. PCNICC/1999/WGEC/INF/2/Add.3, 15 December 1999, Annex, <https://www.legal-tools.org/doc/dc889c/pdf> (“The notion ‘wilful’ in the following sections [on war crimes] includes ‘intent’ and ‘recklessness’ but excludes ordinary negligence.”).

³⁴ ICRC CIL Study, *supra* note 19, at 574 (footnotes omitted).

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would be considered to have acted “wilfully” and thus responsible for a war crime.

C. Case Law

1. ICTY

The ICTY, established to provide accountability for war crimes committed in the Balkans during the 1990s, adopted *dolus eventualis* for several categories of war crimes.³⁵ In *Galić*, the ICTY addressed whether a reckless attack on civilians can be considered a violation of Article 85 of Additional Protocol I to the Geneva Conventions (AP I).³⁶ AP I states that “making the civilian population or individual civilians the object of attack” is a grave breach of the Protocol if the act results in death or serious injury and is done “wilfully.”³⁷ As noted above, the ICRC Commentary on AP I explains “wilfully” to include “the concepts of ‘wrongful intent’ or ‘recklessness’, viz., the attitude of an agent who, without being certain of a particular result, accepts the possibility of it happening.”³⁸ The *Galić* Trial Chamber concluded that “‘wilfully’ incorporates the concept of recklessness, whilst excluding mere negligence. The perpetrator who recklessly attacks civilians acts ‘wilfully.’”³⁹

Subsequent ICTY opinions reiterated the *Galić* formulation for criminal liability for targeting civilians. In *Strugar*, the trial chamber quotes *Galić* in considering the use

³⁵ It specifically rejected “recklessness” as a standard for “murder” in violation of Common Article 3. *See, e.g.*, Prosecutor v. Orić, Case No. IT-03-68-T, Trial Chamber Judgment, n.1020 (Int’l Crim. Trib. for the Former Yugoslavia June 30, 2006). The International Criminal Tribunal for Rwanda applied the recklessness standard, but in the context of human rights law, not IHL. Prosecutor v. Bisengimana, Case No. ICTR-00-60-T ¶ 71 (Int’l Crim. Trib. for Rwanda Apr. 13, 2006) (“To establish the mens rea of extermination, the Prosecution must prove that the accused intended the killings, or was *reckless or grossly negligent* as to whether the killings would result and was aware that his acts or omissions formed part of a mass killing event.” (emphasis added)).

³⁶ *Galić* Trial Chamber Judgment, *supra* note 21, ¶ 54.

³⁷ Additional Protocol I, *supra* note 19, art. 85.

³⁸ Int’l Comm. of the Red Cross, Commentary on the Additional Protocols, *supra* note 32, ¶ 3474.

³⁹ *Galić* Trial Chamber Judgment, *supra* note 21, ¶ 54 (citing the ICRC Commentary to Article 85 of Additional Protocol I).

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of sustained artillery fire which killed civilians “without regard to military targets.”⁴⁰ In *Perišić*, the ICTY reaffirmed *Galić*’s finding that recklessness is an appropriate standard for attacks against the civilian population.⁴¹ In the same case, the ICTY also found that an indirect intent standard, where the perpetrator knew the probable harm of his action but acted anyway, satisfied the mens rea component for the crimes of murder⁴² and inhumane acts.⁴³

In the *Delalić* case, the ICTY considered the actions of four defendants accused, inter alia, of murdering detainees in a prison camp during the armed conflict in the former Yugoslavia.⁴⁴ Here, the Trial Chambers concluded that “the necessary intent, meaning *mens rea*, required to establish the crimes of willful killing and murder, as recognized in the Geneva Conventions, is present where there is demonstrated intention on the part of the accused to kill, or inflict serious injury in reckless disregard of human life.”⁴⁵ While slightly more searching than the standard for murder adopted in *Perišić*, it nonetheless includes a recklessness component.⁴⁶ And, indeed,

⁴⁰ Prosecutor v. Strugar, Case No. IT-01-42-T, Trial Judgment, ¶ 345 (Int’l Crim. Trib. for the Former Yugoslavia Jan. 31, 2005).

⁴¹ Prosecutor v. Perišić, Case No. IT-04-81-T, Trial Judgment, ¶ 100 (Int’l Crim. Trib. for the Former Yugoslavia Sept. 6, 2011).

⁴² *Id.* ¶ 104 (“The mens rea for murder includes both direct and indirect intent. . . . [I]ndirect intent comprises the perpetrator’s knowledge that the death of the victim was the probable consequence of his act or omission.”).

⁴³ *Id.* ¶ 112 (“Indirect intent [for the crime of inhumane acts] requires that the perpetrator knew that his or her act or omission was likely to cause serious physical or mental suffering or a serious attack upon human dignity and was reckless thereto.”).

⁴⁴ See Prosecutor v. Delalić, Case No. IT-96-21-T, Trial Judgement, ¶ 3 (Int’l Crim. Trib. for the Former Yugoslavia Nov. 16, 1998).

⁴⁵ *Id.* ¶ 439.

⁴⁶ The ICRC’s customary international law study cites the *Delalić* case for the proposition that “International case-law has indicated that war crimes are violations that are committed wilfully, i.e., either intentionally (*dolus directus*) or recklessly (*dolus eventualis*).” ICRC CIL Study, *supra* note 19, at p. 574.

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it has been described as using “recklessness or *dolus eventualis* to infer intention.”⁴⁷

In *Tadić*, the ICTY also established recklessness as the mens rea standard for crimes committed by a joint enterprise other than those explicitly agreed upon by the group. Responsibility for such crimes only attaches if “(1) it was *foreseeable* that such a crime might be perpetrated by one or other members of the group and (ii) the accused *willingly took that risk*.”⁴⁸ The ICTY appellate court emphasized that “more than negligence is required.”⁴⁹ The opinion describes the foreseeability component of the intent standard as *dolus eventualis* or advertent recklessness.⁵⁰ The *Tadić* mens rea standard was favorably cited in two subsequent ICTY cases, *Stakić*⁵¹ and *Prlić*.⁵²

In *Blaškić*, the ICTY Appeals Chamber concluded that “[a] person who orders an act or omission with the awareness of the substantial likelihood that crime will be committed in the execution of that order, has the requisite *mens rea* for establishing liability under Article 7(1) pursuant to ordering.”⁵³

⁴⁷ Sarah Knuckey, *Murder in Common Article 3*, in THE 1949 GENEVA CONVENTIONS: A COMMENTARY (Andrew Clapham, Paola Gaeta & Marco Sassòli eds., 2015), at ¶ 18.

⁴⁸ Prosecutor v. Tadić, Case No. IT-94-1-A, Appeals Judgment, ¶ 228 (Int’l Crim. Trib. for the Former Yugoslavia July 15, 1999).

⁴⁹ *Id.* ¶ 220.

⁵⁰ *Id.*

⁵¹ Prosecutor v. Stakić, Case No. IT-97-24-A, Appeals Judgement, ¶ 65 (Int’l Crim. Trib. for the Former Yugoslavia Mar. 22, 2006).

⁵² Prosecutor v. Prlić, Case No. IT-04-74-A, Appeals Judgement, ¶ 587 (Int’l Crim. Trib. for the Former Yugoslavia Nov. 29, 2017). *See also Stakić*, *supra* note 53, ¶¶ 584–7 (finding *dolus eventualis* suffices, meaning, “if the actor engages in life-endangering behavior, his killing becomes intentional if he ‘reconciles himself’ or ‘makes peace’ with the likelihood of death. Thus if the killing is committed with ‘manifest indifference to the value of human life,’ even conduct of minimal risk can qualify as intentional homicide”); Prosecutor v. Hadžihasanović & Kubura, Case No. IT-01-47-T, Trial Chamber Decision on Motions for Acquittal Pursuant to Rule 98 *Bis* of the Rules of Procedure and Evidence, ¶ 37 (Int’l Crim. Trib. for the Former Yugoslavia Sept. 27, 2004) (citing *Stakić*); Prosecutor v. Brđanin, Case No. IT-99-36-T, Trial Chamber Judgment ¶¶ 386–87 (Int’l Crim. Trib. for the Former Yugoslavia Sept. 1, 2004) (holding that intent includes *dolus eventualis*—entailing recklessness—but not negligence or gross negligence).

⁵³ Prosecutor v. Blaškić, Case No. IT-95-14-A, Appeals Judgment, ¶ 42 (Int’l Crim. Trib. for the Former Yugoslavia July 29, 2004).

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In its reasoning, the ICTY considered the recklessness in various common law jurisdictions and again invoked the civil law concept of *dolus eventualis*.⁵⁴

A report from the ICTY’s Office of the Prosecutor evaluating whether the NATO bombing campaign resulted in war crimes similarly included recklessness in its definition of intent. In articulating the standard for crimes related to targeting nonmilitary objectives, the report found that “attacks which cause disproportionate civilian casualties or civilian property damage may constitute the actus reus for the offence of unlawful attack under Article 3 of the ICTY Statute. The *mens rea* for the offence is intention or recklessness, not simple negligence.”⁵⁵ Additionally, the report highlighted that in deciding whether the mens rea requirement had been met, due consideration should be given to the duties commanders have to (1) do everything practicable to verify targets are military objectives, (2) use methods and means to minimize incidental civilian casualties or property damage, and (3) refrain from attacks which may be expected to cause disproportionate civilian casualties.⁵⁶

2. *Special Court for Sierra Leone*

The Special Court for Sierra Leone (SCSL) was set up by Sierra Leone and the United Nations as a hybrid judicial body to prosecute war crimes that occurred during the Sierra Leone civil war. In fulfilling this role, the SCSL endorsed a mens rea threshold for certain war crimes that includes acts committed recklessly.

In the court’s most significant case, brought against former President of Liberia, Charles Taylor, the SCSL Appeals Chamber considered whether “an accused can be held criminally liable if he volitionally (or willingly) performs the *actus reus* of aiding and abetting liability (providing assistance,

⁵⁴ *Id.* ¶¶ 34–40.

⁵⁵ Off. of the Prosecutor, Int’l Crim. Trib. for the Former Yugoslavia, *Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia*, 39 INT’L LEGAL MATERIALS 1257, ¶ 28, (June 13, 2000), <https://www.icty.org/x/file/Press/nato061300.pdf>.

⁵⁶ *Id.*

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encouragement or moral support) *knowing* (or being aware of the substantial likelihood) that his acts or conduct will have an effect on the commission of the crimes.”⁵⁷ It concluded that “knowledge” of the consequence of one's acts was, indeed, a culpable mental state for aiding and abetting liability under customary international law.

In arriving at that conclusion, the Appeals Chamber discussed *mens rea* under customary international law at some length. It acknowledged that “[t]he jurisprudence on *mens rea* under customary law recognizes and discusses three such standards: direct intent, knowledge and awareness of the substantial likelihood.”⁵⁸ It then explained:

The Appeals Chamber uses the term ‘awareness of the substantial likelihood’ – which *generally* corresponds to terms such as ‘conditional intent’, ‘advertent recklessness’, ‘indirect intent’, ‘*bedingte Vorsatz*’ and ‘*dolus eventualis*’ – to describe an accused’s awareness and acceptance of the substantial likelihood that his acts or conduct have an effect on the commission of the crime. This is a standard articulated in this Court’s jurisprudence. . . . For planning, instigating, ordering and aiding and abetting liability, the consequence of the accused’s acts or conduct is to have an effect on the commission of the crime.⁵⁹

Like the ICTY, then, the SCSL similarly accepted recklessness (*dolus eventualis*) as sufficient to meet the threshold of certain war crimes.

3. *International Criminal Court*

The International Criminal Court Rome Statute Article 32(1) provides that “[a] mistake of fact shall be a ground for

⁵⁷ Prosecutor v. Taylor, SCSL-03-01-A, Appeals Chamber Judgment, ¶ 415 n.1289 (Special Court for Sierra Leone Sept. 26, 2013).

⁵⁸ *Id.* (citing Int’l Comm. of the Red Cross, Commentary on the Additional Protocols, *supra* note 32, ¶ 3474).

⁵⁹ *Id.*

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excluding criminal liability only if it negates the mental element required by the crime.”⁶⁰ The Statute, moreover, expressly adopts a heightened mens rea standard, providing, “[u]nless otherwise provided, a person shall be criminally responsible for punishment for a crime within the jurisdiction of the court only if the material elements are committed with intent and knowledge.”⁶¹ It further specifies that “a person has intent where: (a) In relation to conduct, that person means to engage in the conduct; (b) In relation to a consequence that person means to cause that consequence or is aware that it will occur in the ordinary course of events.”⁶² And finally, it defines knowledge as “awareness that a circumstance exists or consequence will occur in the ordinary course of events.”⁶³ Under this standard, an honest mistaken belief that persons or objects are not civilians would negate the mental element of the crime—that is true even if the belief is not reasonable. Thus, the Rome Statute clearly excludes liability in instances of recklessness.

This reading of the plain text is supported by Article 30’s *travaux préparatoires*, which make clear that the Rome Statute’s drafters considered and elected to omit reference to either *dolus eventualis* or recklessness.⁶⁴ Furthermore, most commentators on Article 30 have concluded that a perpetrator acting recklessly would not fulfill the “intent and knowledge”

⁶⁰ Rome Statute of the International Criminal Court art. 32(1), July 17, 1998, 2187 U.N.T.S. 90 [hereinafter Rome Statute].

⁶¹ *Id.*, art. 30.

⁶² *Id.* art. 30(2).

⁶³ *Id.* art. 30(3).

⁶⁴ See WILLIAM A. SCHABAS, *THE INTERNATIONAL CRIMINAL COURT: A COMMENTARY ON THE ROME STATUTE* 473 (2d ed. 2016). In its *Bemba* decision, Pre-Trial Chamber II discussed the *travaux préparatoires* of Article 30, finding that the drafters considered *dolus eventualis* and recklessness in early drafts but ultimately excluded these concepts from the final text. *Id.* at 366. See also Decisions Taken by the Preparatory Committee at its Session Held from 11 to 21 February 1997, UN Doc. A/AC.249/1997/L.5, 27; Mohamed Elewa Badar, *Dolus Eventualis and the Rome Statute Without It?*, 12 *NEW CRIM. L. REV.* 433, 444–452 (2009) (tracing the evolution of Article 30 across all drafts of the Rome Statute); GERHARD WERLE & FLORIAN JESSBERGER, 4 *PRINCIPLES OF INTERNATIONAL CRIMINAL LAW* 222 (2020).

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requirements of Article 30.⁶⁵ This understanding of the mens rea requirement has been reflected in the ICC’s decisions.⁶⁶

As we shall see in the next Section, several scholars read the decision of the framers of the Rome Statute to impose a heightened intent standard as evidence that a recklessness—or *dolus eventualis*—standard does not generally apply to war crimes. But that is a mistaken inference. As Johan D. Van der Vyver pointed out, “if one takes into account the resolve to confine the jurisdiction of the ICC to ‘the most serious crimes of concern to the international community as a whole,’ it is reasonable to accept that crimes committed without the highest degree of *dolus* ought as a general rule not to be prosecuted in the ICC.”⁶⁷

⁶⁵ See WERLE & JESSBERGER, *supra* note 66, at 220–21 (canvassing secondary source commentary on whether Article 30 covers recklessness or *dolus eventualis*).

⁶⁶ The one instance where a Pre-Trial Chamber (PTC) of the ICC tried to read Article 30 to encompass *dolus eventualis* was overturned by the Trial Chamber. In the *Lubanga* case, PTC I wrote that the “volitional element also encompasses . . . situations in which the suspect is aware that the risk of the objective elements of the crime may result from his or her actions or omissions and accepts such an outcome by reconciling himself or herself with it or consenting to it (also known as *dolus eventualis*.)” Prosecutor v. Lubanga, No. ICC-01/04-01/06, Pre-Trial Chamber I Decision on the Confirmation of Charges, ¶ 352 (Jan. 29, 2007). The Appeals Chamber rejected this as an inappropriate reading of Article 30. Prosecutor v. Lubanga, No. ICC-01/04-01/06, Appeals Chamber Judgment, ¶¶ 447–50 (Dec. 1, 2014). Instead, it favorably endorsed the finding of the *Bemba* trial from PTC II which concluded that “the text of article 30 of the Statute does not encompass *dolus eventualis*, recklessness or any lower form of culpability aims.” Prosecutor v. Bemba, Case No. ICC-01/05-01/08, Pre-Trial Chamber II Decision on the Confirmation of Charges, ¶ 369 (June 15, 2009). See also Prosecutor v. Katanga, No. ICC-01/04-01/07, Trial Chamber II Judgment, ¶ 776 (Mar. 7, 2014). It is worth noting that the phrase “[u]nless otherwise provided,” Rome Statute, art. 30, allows for deviation in certain circumstances. For example, Article 28(1) on the responsibility of military commanders sets a “should have known” standard, which is akin to negligence. *Bemba*, Pre-Trial Chamber II Decision, ¶ 432-34 (June 15, 2009), https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2009_04528.PDF. Some argue for a more expansive reading of the exception, though they are in the minority. See, e.g., Johan D. Van der Vyver, *The International Criminal Court and the Concept of Mens Rea in International Criminal Law*, 12 MIAMI INT’L & COMP. L. REV. 57, 64–65 (2004).

⁶⁷ Van der Vyver, *supra* note 68, at 64–65.

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The choice of the Rome Statute’s authors to insist on a heightened mens rea standard is appropriate—and specific—to the ICC’s role as a “court of last resort” that is only authorized to exercise its mandate over “the gravest crimes of concern to the international community.”⁶⁸ Under the principle of “complementarity,” only when member states fail to provide accountability does the ICC have jurisdiction to prosecute. As one of us explained in an earlier article, “Because the ICC wields complementary jurisdiction and only addresses the most serious crimes, it makes sense that the requisite elements of liability are more stringent—and hence narrower—than those of the ad hoc and hybrid tribunals that exercise primary jurisdiction.”⁶⁹ Knut Doermann, then Legal Advisor, International Committee of the Red Cross, writing shortly after the Rome Statute was negotiated, explained that “[s]ince the relationship between the International Criminal Court and national tribunals is based on the principle of complementarity, nothing in the Statute for the ICC releases States from their obligations under existing IHL to repress serious violations of IHL.”⁷⁰ He continued, “This fact is important as there are certain IHL obligations which are not covered in the Statute, such as some of the grave breach provisions of AP I.”⁷¹

This view finds support in the Statute itself. Article 10 of the Rome Statute states that nothing “shall be interpreted as limiting or prejudicing in any way existing or developing rules of international law for purposes other than this Statute.”⁷² Similarly, Article 22 notes that while a person cannot be held criminally liable before the ICC unless their act was a crime as defined by the Rome Statute, this determination “shall not affect

⁶⁸ *About the Court*, INT’L CRIM. CT., <https://www.icc-cpi.int/about> (last visited Jan. 6, 2024). The Rome Statute also specifically states: “A mistake of fact shall be a ground for excluding criminal responsibility only if it negates the mental element required by the crime.” Rome Statute, *supra* note 62, art. 32(1).

⁶⁹ Oona A. Hathaway, Alexandra Francis, Aaron Haviland, Srinath Reddy Kethireddy & Alyssa T. Yamamoto, *Aiding and Abetting in International Criminal Law*, 104 CORNELL L. REV. 1593, 1626 (2019).

⁷⁰ Knut Doermann, *Individual and State Responsibility in the Field of International Humanitarian Law*, 18 REFUGEE SURVEY QUARTERLY 81 (1999).

⁷¹ *Id.*

⁷² Rome Statute, *supra* note 62, art. 10.

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the characterization of any conduct as criminal under international law independently of this Statute.”⁷³ Hence even though the Rome Statute does not provide for accountability in cases where civilians are killed recklessly, that does not mean that they are not obliged to do so under customary international law.

In sum, the views of the ICRC and international jurisprudence support the conclusion that, outside the Rome Statute, recklessness is a culpable mens rea for war crimes, including grave breaches of the Geneva Conventions: “willful killing, torture, inhumane treatment . . . willfully causing great suffering or serious injury to body or health, and extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.”⁷⁴ Nothing in the law provides greater latitude in case of time-sensitive targets. It is notable, moreover, that the ICRC and the international case law treat the question of accountability for war crimes as a case-by-case matter. Investigators’ determination of whether a crime has taken place is based on an individual incident. The structure of the law, then, does not presently provide a mechanism for addressing systemic errors.

D. Scholarship

There is only limited scholarship on the law relevant to mistakes in war, much of it appearing in short online articles. Indeed, part of what is revealing about the scholarship on mistakes is its episodic nature—each new public “mistake” evokes a flurry of online reaction and then the debate dies down until the next incident.⁷⁵ Even so, the views expressed are illuminating, providing significant support for the proposition that a “mistake” can be a war crime. It also illustrates the focus, even among scholars, on individual events rather than systems.

⁷³ *Id.* art. 22.

⁷⁴ Geneva Convention I, *supra* note 33, art. 49.

⁷⁵ The key exception, discussed at some length below, is Jens David Ohlin, *Targeting and the Concept of Intent*, 35 MICH. J. INT’L L. 79 (2013). There are other works on related topics that are illuminating. *E.g.*, Janina Dill, *Do Attackers have a Legal Duty of Care? Limits to the ‘Individualization of War’*, 11 INT’L THEORY 1 (2019) (arguing that IHL does and should impose a legal duty of care).

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1. *The Downing of MH17 (2014)*

In July 2014, pro-Russian separatists shot down Malaysia Airlines Flight 17, a passenger flight from Amsterdam to Kuala Lumpur, killing all 283 passengers and 15 crew members. At the time of the downing of MH-17, President Vladimir Putin (whose military, it would become clear, was ultimately responsible for supplying the weapon used) called it an “awful tragedy.”⁷⁶ Later investigation by the Dutch Safety Board concluded that the airline had been downed by a surface-to-air missile launched from pro-Russian separatist-controlled territory in Ukraine using a launcher transported from Russia on the day of the crash and returned to Russia afterwards. Three men—two Russian, one Ukrainian—were tried in absentia in a Dutch court and found criminally responsible even though it seemed likely that they believed that MH17 was a Ukrainian military transport, not a civilian airplane.⁷⁷

Kevin Jon Heller concludes that the events do not qualify as war crimes. He writes that the MH17 downing should be treated as murder, not a war crime. He observed that “everything we know to date about the attack indicates that the separatists honestly believed MH17 was a Ukrainian military transport, not a civilian airplane. If so . . . [t]he attack would still qualify as murder under domestic law — but it would not

⁷⁶ Associated Press, *Putin’s Full Statement on the MH17 Disaster*, N.Y. POST (July 18, 2014), <https://nypost.com/2014/07/18/putins-full-statement-on-the-mh17-disaster/>.

⁷⁷ Jennifer Rankin, *Three Men Found Guilty of Murdering 298 People in Shooting Down of MH17*, THE GUARDIAN (Nov. 17, 2022), <https://www.theguardian.com/world/2022/nov/17/three-men-found-guilty-of-murdering-298-people-in-flight-mh17-bombing>; Levenslange gevangenisstraffen voor doen verongelukken vlucht MH17 en moord op de 298 inzittenden (Nov. 17, 2022), <https://www.rechtspraak.nl/Organisatie-en-contact/Organisatie/Rechtbanken/Rechtbank-Den-Haag/Nieuws/Paginas/MH17.aspx>. (“It appears that the crew thought not to fire the missile at a civilian aircraft but at a military aircraft. But even then there is still intent and premeditation in shooting down that plane and killing its occupants.”) (trans. by Google translate). One suspect was acquitted. *Id.*

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qualify as a war crime, under either the Rome Statute or the jurisprudence of the ICTY.”⁷⁸

Others, however, call it a war crime. Navi Pillay, UN High Commissioner for Human Rights, declares that “[t]his violation of international law, given the prevailing circumstances, may amount to a war crime.”⁷⁹ William Burke White likewise argues that the strike was likely a war crime, *even if* the objective was to strike a Ukrainian transport aircraft. That is because the error demonstrated a failure to adhere to the duty of care, including doing “everything feasible to verify that targets are military objectives.”⁸⁰ Burke White observes that many steps could have been taken to differentiate MH17 from a military-transport plane. If “these basic steps were not taken, even an accidental strike on MH17 would constitute a war crime.”⁸¹

2. *Kunduz Hospital Strike (2016)*

In the wake of the U.S. strike on a Médecins Sans Frontières hospital in Kunduz, Afghanistan, that killed forty-two people, President Obama called MSF International president, Dr. Joanne Liu, to apologize for the incident, which he called a “tragic incident.”⁸² Dr. Liu responded, “It is unacceptable that the bombing of a hospital and the killing of

⁷⁸ Kevin Jon Heller, *MH17 Should be Framed as Murder, Not as a War Crime*, OPINIOJURIS (Nov. 8, 2014), <http://opiniojuris.org/2014/08/11/mh-17-framed-murder-war-crime/>.

⁷⁹ *Downing of MH17 jet in Ukraine ‘may be a war crime’ – UN*, BBC NEWS (July 28, 2014), <https://www.bbc.com/news/world-europe-28520813>.

⁸⁰ William Burke White, *The Framing of MH-17*, PROJECT SYNDICATE (Aug. 8, 2014), <https://www.project-syndicate.org/commentary/william-burke-white-wants-the-downing-of-malaysia-airlines-flight-17-to-be-called-a-probable-war-crime> (quoting Int’l Comm. of the Red Cross, *Rule 16: Target Verification*, <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule16>).

⁸¹ *Id.*

⁸² Off. of the Press Sec’y, *Readout of the President’s Call with Doctors Without Borders International President Dr. Joanne Liu*, THE WHITE HOUSE (Oct. 7, 2015), <https://obamawhitehouse.archives.gov/the-press-office/2015/10/07/readout-presidents-call-doctors-without-borders-international-president>.

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staff and patients can be dismissed as collateral damage or brushed aside as a mistake.”⁸³

After an investigation, the U.S. military announced that it was disciplining sixteen service members. But the punishments were “administrative actions” only; none of those involved faced criminal charges because the Pentagon determined the attack was “unintentional.”⁸⁴ Neither the gunship crew members nor the Special Forces on the ground directing the strike “knew they were striking a medical facility.”⁸⁵ A summary of a 120-page report explained:

[T]he investigation did not conclude that these failures amounted to a war crime. The label “war crimes” is typically reserved for *intentional* acts — *intentionally* targeting civilians or *intentionally* targeting protected objects. The investigation found that the tragic incident resulted from a combination of unintentional human errors and equipment failures, and that none of the personnel knew that they were striking a medical facility.⁸⁶

Jens Ohlin comes to a similar conclusion, though he takes a different route. Ohlin draws on his article-length treatment of targeting and the concept of intent—one of the few on the topic—and applies it to the strike.⁸⁷ He notes that under some legal

⁸³ *MSF: Even War Has Rules*, MÉDECINS SANS FRONTIÈRES, (Oct. 7, 2015), <https://www.doctorswithoutborders.org/latest/msf-even-war-has-rules>.

⁸⁴ Matthew Rosenberg, *Pentagon Details Chain of Errors in Strike on Afghan Hospital*, N.Y. TIMES (Apr. 29, 2016), <https://www.nytimes.com/2016/04/30/world/asia/afghanistan-doctors-without-borders-hospital-strike.html>.

⁸⁵ *Id.*

⁸⁶ Knuckey et al., *supra* note 5 (quoting the report summary, which has since been removed from the U.S. government’s website); *see also Investigation Report of the Airstrike*, *supra* note 4.

⁸⁷ Jens David Ohlin, *Targeting and the Concept of Intent*, 35 MICH. J. INT’L L. 79 (2013). Ohlin argues that the problem of determining the intent required for criminal liability for civilian deaths represents a “clash of legal cultures.” He expresses some skepticism about application of the civil law “*dolus eventualis*” to the law of targeting in part because it was excluded by

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traditions, “intent” encompasses recklessness. If intent were given this wider meaning, he observes, it is possible that U.S. service members might potentially be prosecuted “for intentionally directing an attack against the civilian population because ‘intentionally’ includes lower mental states such as *dolus eventualis* or recklessness.”⁸⁸ But, he worries about that argument. He explains that the problem with this argument is the following: “If intent = recklessness, then all cases of legitimate collateral damage would count as violations of the principle of distinction, because in collateral damage cases the attacker kills the civilians with knowledge that the civilians will die.”⁸⁹ (In this inference, we part ways with Ohlin—we consider collateral damage a separate issue from reckless intent, a point to which we will return.) He thus concludes that the solution is to “explicitly codify a new war crime of recklessly attacking civilians.”⁹⁰

John Sifton, Asia policy director of Human Rights Watch, contests the Pentagon’s conclusion that there was no war crime: “The failure to bring any criminal charges was ‘simply put, inexplicable.’”⁹¹ Sifton notes that there are precedents for war crimes prosecutions based on recklessness or negligence, including under the United States military code.⁹² Sarah Knuckey, Anjali Parrin and Keerthana Nimmala similarly question the U.S. government’s conclusion. They note that “a number of international cases and UN-mandated inquiries have found that ‘recklessness’ or ‘indirect intent’ could satisfy the intent requirement.”⁹³ They note, too, that Article 85 of Additional Protocol I provides that intent encompasses recklessness. They conclude by calling on the U.S. government

the framers of the Rome Statute. He worries, too, about the “double effect” of treating those who foresee collateral damage the same as those who deliberately kill civilians. We address the argument about the Rome Statute, *supra* Subsection II.C.3.

⁸⁸ Jens Ohlin, *Was the Kunduz Hospital Attack a War Crime?*, OPINIOJURIS (May 1, 2016), <http://opiniojuris.org/2016/05/01/was-the-kunduz-hospital-attack-a-war-crime/>.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.* (quoting Sifton).

⁹² *Id.*

⁹³ Knuckey et al., *supra* note 5.

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to more fully explain the legal test it had applied in concluding that war crimes had not been committed.

Alex Whiting similarly concludes that it is possible that the strike constitutes a war crime if the recklessness standard for intent were applied. Whiting begins his analysis by noting that the ICTY relied on a recklessness standard to convict defendants of war crimes.⁹⁴ But the Rome Statute of the International Criminal Court, he observes, clearly excludes recklessness and its civil law counterpart (*dolus eventualis*) as a basis for criminal liability, expressly requiring a higher level of intent. Whiting rightly points out, however, that the “Rome Statute does not necessarily limit the scope of customary international law”—and, indeed, given the ICC’s distinctive role vis-à-vis domestic courts, there is good reason that the Rome Statute would establish a higher bar for intent. If the ICTY standard in *Blaškić* were applied to the Kunduz strike, he explains, prosecutors would focus on the U.S. officials’ awareness of a substantial risk of a criminal outcome: “In a conduct of hostilities case involving questions of distinction and proportionality, the quintessential case might be the commander who had time to reflect but was simply indifferent to whether targets were military or civilian.”⁹⁵ In such a case, a prosecutor may determine that war crimes had been committed.

3. *Ukrainian Airliner over Tehran (2020)*

In early 2020, Iran mistakenly shot down a Ukrainian airliner over Tehran, killing 176 people on board. After initially claiming that mechanical issues were responsible, Iran acknowledged it had shot the plane down, blaming “human error” provoked by the plane’s turn toward a sensitive military base.⁹⁶ The strike took place on the same day Iranian missiles struck American bases in Iraq, which likely played a role in Iran’s heightened concern.

⁹⁴ Whiting, *supra* note 5.

⁹⁵ *Id.*

⁹⁶ Farnaz Fassihi, *Iran Says It Unintentionally Shot Down Ukrainian Airliner*, N.Y. TIMES (Jan. 10, 2020), <https://www.nytimes.com/2020/01/10/world/middleeast/missile-iran-plane-crash.html>.

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Writing a week after the events, Marko Milanovic authored two thoughtful blog articles on the topic.⁹⁷ He asks, “How exactly does international law deal with situations in which state agents use lethal force and do so under the influence of a mistake or error of fact?” He notes that domestic legal systems have long dealt with such issues—and most provide for such mistakes in their criminal law. Noting that there is a “significant gap here in the international legal literature,” he offers what he characterizes as a “conversation starter” on the topic.

Milanovic is particularly helpful in drawing a distinction between two scenarios: First is the scenario in which there is an honest but *unreasonable* mistake of fact. For example, the downing of MH17 might fall into this category: Those responsible for its downing may have believed it was a military transport plane, but that was not a reasonable belief given that it would have been easy to determine that it was not. The Kunduz hospital strike, too, would fall into this category, on the grounds that those involved failed to take feasible precautions. Milanovic notes:

An honest but *unreasonable* mistake of fact would inevitably be one which would violate specific rules of IHL, such as the duty to take all feasible precautions in attack and in particular the duty to do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects, per Art. 57(2)(a)(i) of AP I. In other words, these rules encapsulate an objective reasonableness requirement.⁹⁸

The situation is different, Milanovic explains, if the mistake was both honest and reasonable. He concludes no rule of IHL specifically addresses this situation, “[b]ut the overall architecture of these rules, e.g. as written in AP I or the ICRC

⁹⁷ Marko Milanovic, *Mistakes of Fact When Using Lethal Force in International Law: Part I*, EUR. J. INT’L L.: TALK! (Jan. 14, 2020), <https://www.ejiltalk.org/mistakes-of-fact-when-using-lethal-force-in-international-law-part-i/>.

⁹⁸ *Id.*

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Customary IHL Study, would seem to imply that if they are all respected the mistaken death of a civilian, however unfortunate, would not ipso facto violate IHL.”⁹⁹ In such cases, he rightly notes, states often offer compensation on an *ex gratia* basis, without admitting any legal liability.

To further illustrate the difference Milanovic cites two attacks that took place during the NATO intervention in the former Yugoslavia in 1999. In one case, a NATO aircraft launched a precision guided bomb at the Grdelica Gorge railway bridge, a lawful military target. The pilot did not know that a train was about to cross the bridge, and the bomb hit the train, leaving the bridge standing. When the pilot saw the bridge was still standing, he fired a second bomb which also hit the train. Ten people died. NATO justified the attack as an accident, and the ICTY Prosecutor declined to prosecute, though the committee was divided about whether the second attack was reckless.¹⁰⁰

In the second case, a U.S. bomber hit the Chinese embassy in Belgrade, destroying it. The crew honestly believed that they were targeting the Yugoslav Federal Directorate for Supply and Procurement, which would have been a lawful military target, because they were using an outdated map.¹⁰¹ Milanovic says that this mistake was honest but likely not reasonable “as there were plenty of feasible precautions that could have been taken to avoid it.” The upshot, he concludes, “is that IHL appears to excuse uses of lethal force against civilians or civilian objects which result from honest *and* reasonable mistakes of fact. Honest but *unreasonable* mistakes of facts would not be excused, since they would inevitably be in violation of IHL rules on precaution.”¹⁰²

⁹⁹ *Id.*

¹⁰⁰ *Final Report to the Prosecutor, supra* note 57, ¶62 (“The committee has divided views concerning the attack with the second bomb in relation to whether there was an element of recklessness in the conduct of the pilot or WSO. Despite this, the committee is in agreement that, based on the criteria for initiating an investigation . . . this incident should not be investigated.”).

¹⁰¹ China and Serbia rejected the claim that this was an error. Kevin Ponniah & Lazara Marinkovic, *The Night the US Bombed a Chinese Embassy*, BBC NEWS (May 6, 2019), <https://www.bbc.com/news/world-europe-48134881>.

¹⁰² Milanovic, *supra* note 99. Interestingly, Milanovic distinguishes between international criminal law and IHL. For international criminal law,

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Applying this analysis to the Iranian decision to shoot down the Ukrainian airliner, he concludes that “even if Iran’s mistake of fact that resulted in the destruction of the aircraft was honest, it was not reasonable, and as such it would bear state responsibility for violating the victims’ human rights.”¹⁰³ Because Iran is not presently engaged in armed conflict with any of the nations involved, the act is not a violation of IHL, which applies only during armed conflict. Presumably, though he does not say so, he would have concluded that the event was a violation of IHL if that body of law applied (though because he applies the Rome Statute mens rea test to international criminal law, he presumably would conclude that it would not be a war crime).

Of course, the distinction Milanovic draws between reasonable and unreasonable mistakes of fact does not itself answer how to distinguish between the two. He makes reference, as in the narratives above, to the requirement to take all “feasible precautions.” The test he offers, moreover, is closer to what would ordinarily be referred to as a “negligence” standard—that is, that the actor *should have been aware* of a substantial and unjustifiable risk that the material element exists or will result from his conduct—than it is to “recklessness”—that the actor consciously disregarded a substantial and unjustifiable risk that the material element exists or will result from his conduct. If that is right, then his approach may be more stringent than many when it comes to IHL. It would, for example, be in tension with the ICRC’s position, as the ICRC expressly disavows the negligence standard as a mens rea standard for culpability for making the civilian population or individual civilians the object of attack, while embracing recklessness. Of course, because he develops the test to apply across substantive areas—IHL, human rights law, and jus ad bellum—the test he develops may not be intended to be used for purposes of criminal accountability.

he relies on analysis of the Rome Statute, which, as noted earlier, applies a mens rea standard that precludes recklessness. As we explained earlier, we do not agree that the Rome Statute dictates the customary ICL standard.

¹⁰³ Marko Milanovic, *Mistakes of Fact When Using Lethal Force in International Law: Part III*, EUROPEAN J. INT’L L.: TALK! (Jan. 15, 2020), <https://www.ejiltalk.org/mistakes-of-fact-when-using-lethal-force-in-international-law-part-iii/>.

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* * *

In sum, while there is not complete agreement among scholars about the applicable standard, a few clear themes emerge: First, there are some who treat the Rome Statute mens rea knowledge standard as the guiding standard even outside the ICC context (an approach, for reasons we explain above, we do not share). Second, there is substantial, though not universal, agreement that reckless actions that result in the disproportionate deaths of civilians in war can constitute a violation of international humanitarian law and, consequently, a war crime.

Third and finally, perhaps what is most striking about the scholarship on criminal culpability for mistakes in war is that there is little attention paid to patterns of practice—or systemic failures. Incidents are treated as singular events. That is understandable: most scholars have little direct access to information about regular civilian casualties that take place in wartime. To obtain such information, one would require access to internal state records of civilian deaths resulting from strikes as well as on-the-ground reporting that examines and tests the veracity of those accounts.

Part III of this Article provides just that, drawing on documentation obtained through FOIA litigation and award-winning on-the-ground reporting. This makes possible, for the first time in legal scholarship, an examination of how the U.S. military assesses its mistakes, how its assessments compare to information drawn from outside sources including accounts of survivors, and how the U.S. government corrects—or fails to correct—for patterns of mistakes over time.

II. STATE RESPONSIBILITY FOR “MISTAKES”

The International Military Tribunal at Nuremberg famously stated, “Crimes against International Law are committed by men, not by abstract entities, and only by punishing individuals who commit such crimes can the provisions of International Law be enforced.” Individual criminal responsibility flows from this ideal. Any serious violation of international humanitarian law can be prosecuted

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as a war crime,¹⁰⁴ and, indeed, states are under an obligation to prosecute “grave” breaches. One goal of providing for individual criminal accountability is to avoid collective retributive justice. But states are not entirely absolved of responsibility. And, indeed, there is a doctrine of *state* responsibility for violations of international law, including international humanitarian law.

Common Article 1, “common” because it appears in all four Geneva Conventions, provides that “the High Contracting Parties undertake to respect and to ensure respect for the present Convention in all circumstances.” This means that all contracting states, which is all states,¹⁰⁵ will take steps to ensure that those in the armed forces will abide by the Geneva Conventions. All 196 States Parties to the Geneva Conventions are bound to three fundamental obligations—to enact domestic legislation required to prosecute alleged war criminals, to search for those accused of committing war crimes, and to try such individuals or turn them over to another State for trial.¹⁰⁶ This obligation applies not only to grave breaches, but to all violations of the four conventions.¹⁰⁷

Under Common Article 1, states are not only obligated to “respect,” but also to “ensure respect” for the conventions.¹⁰⁸

¹⁰⁴ Hathaway et al., *What is a War Crime?*, *supra* note 20.

¹⁰⁵ The four Geneva Conventions have been ratified by 196 states, including all U.N. member states, as well as the Holy See, the State of Palestine, and the Cook Islands. *See, e.g.*, Geneva Convention Relative to the Protection of Civilian Persons in Time of War art. 1, Aug. 12, 1949, 6 U.S.T. 3516, 75 U.N.T.S. 287 [hereinafter Geneva Convention IV].

¹⁰⁶ Each of the Conventions contains nearly identical language to this effect. *See, e.g.*, Geneva Convention I art. 49, *supra* note 33.

¹⁰⁷ The Conventions require States Parties to take, *e.g.*, “measures necessary for the suppression of all acts contrary to the provisions of the present Convention other than [] grave breaches.” *Id.* For more on the duty to investigate violations of IHL that are not grave breaches, see Durward Johnson & Michael N. Schmitt, *The Duty to Investigate War Crimes*, ARTICLES OF WAR (Dec. 22, 2020), <https://lieber.westpoint.edu/duty-investigate-war-crimes/>.

¹⁰⁸ Geneva Convention I, *supra* note 33; Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea art. 1, Aug. 12, 1949, 6 U.S.T. 3217, 75 U.N.T.S. 85 [hereinafter Geneva Convention II]; Geneva Convention Relative to the Treatment of Prisoners of War art. 1, Aug. 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 135 [hereinafter Geneva Convention III]; Geneva Convention IV, *supra* note 107; *see also* Additional Protocol I, *supra* note 19. *See* Int’l

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This creates a separate and independent set of obligations on States. For example, if States are aware of IHL violations by a partner force, whether a state partner or non-state partner, they are obligated to take steps to redress that violation. If the violations continue despite their best efforts, they should withdraw their support for the violating partner force or risk violating Common Article 1.¹⁰⁹

In addition to the Geneva Conventions themselves, the International Law Commission’s Draft Articles on State Responsibility also provide that states are obligated to abide by international law and to ensure that their partners do as well.¹¹⁰ That obligation applies not only to the Geneva Conventions but to customary law, as well. The Draft Articles make clear that “[e]very internationally wrongful act of a State entails international responsibility of that State.”¹¹¹ Any internationally wrongful act thus “gives rise to new international legal relations additional to those which existed before the act took place.”¹¹² For instance, it may trigger a legal responsibility to provide reparations. And it may enable any harmed State to put in place countermeasures to bring the State engaging in wrongful conduct into compliance with its legal obligations.

As with the Conventions, the obligations under the Draft Articles apply not just to States’ own actions, and to the conduct of State organs,¹¹³ but also to the actions of partner forces. Article 8 provides that the “conduct of a person or group of persons shall be considered an act of a State under international law if the person or group of persons is in fact acting on the instructions of, or under the direction or control of, that State in

Committee of the Red Cross, *Commentary of 2016*, art. 1, ¶¶ 118–191 (2016), <https://ihl-databases.icrc.org/en/ihl-treaties/gci-1949/article-1/commentary/2016>.

¹⁰⁹ Oona Hathaway, Emily Chertoff, Lara Domínguez, Zachary Manfredi and Peter Tzeng, *Ensuring Responsibility: Common Article 1 and State Responsibility for Non-State Actors*, 95 TEX. L. REV. 539 (2017).

¹¹⁰ United Nations International Law Commission, *Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries*, UN Doc. A/56/10 (2001), art. 49 [hereinafter Draft Articles].

¹¹¹ *Id.* art. 1.

¹¹² *Id.* art. 1, cmt. 3.

¹¹³ *Id.* art. 4.

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carrying out the conduct.”¹¹⁴ Hence, a State can be held responsible for the actions of a militia, private military contractor, or non-state actor group acting under the direction or control of the State—including if they violate IHL.¹¹⁵ And Article 16 provides that a State that assists another State in the commission of an internationally wrongful act can be internationally responsible for doing so.¹¹⁶ Hence, a State that violates IHL, or whose partner forces do so, can be held responsible for those actions. States that violate their obligations under IHL may be obligated to change their actions to come into compliance with the law, or pay reparations, and they may be subject to countermeasures—that is, the non-performance of an international legal obligation by another State.¹¹⁷

All of the obligations under international humanitarian law outlined in Part I, then, apply to States as well. Given their obligation to “respect” the treaties, States are expected to take steps to ensure that the members of their armed forces comply with international humanitarian law. They are also expected to “ensure respect” by partner forces. And when they learn of possible violations, they are obligated to investigate, and, if there is sufficient evidence that a violation may have taken place, prosecute those responsible, or turn them over to another State for trial.¹¹⁸

Finally, it is worth noting that State responsibility may be broader than international criminal responsibility, as it is not subject to all the limits that apply to criminal responsibility.

¹¹⁴ *Id.* art. 8.

¹¹⁵ While the majority of the Geneva Conventions do not apply to non-state actor groups, Common Article 3, as well as customary international humanitarian law rules on the conduct of hostilities, applies to actions by and actions against organized armed groups.

¹¹⁶ Draft Articles, *supra* note 112, art. 16.

¹¹⁷ *Id.* art. 49.

¹¹⁸ Hathaway et al., *Ensuring Responsibility*, *supra* note 111; M. CHERIF BASSIOUNI & EDWARD M. WISE, *AUT DEDERE AUT JUDICARE: THE DUTY TO EXTRADITE OR PROSECUTE IN INTERNATIONAL LAW* (1995); Amichai Cohen & Yuval Shany, *Beyond the Grave Breaches Regime: The Duty to Investigate Alleged Violations of International Law Governing Armed Conflicts*, 14 *Y.B. OF INT’L HUM. L.* 37 (2011); Raphaël van Steenberghe, *The Obligation to Extradite or Prosecute: Clarifying its Nature*, 9 *J. INT’L CRIM. JUST.* 1089 (2011).

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Whenever a member of a State’s armed forces has committed an IHL violation, the State is under an obligation to investigate and punish those actions. But even in cases where no individual can be held responsible for a reckless violation of certain IHL provisions, the State may nonetheless be under a duty to take steps to prevent those violations.

When a State is responsible for a violation of IHL, moreover, that State has an obligation to provide reparations. The principle that States are obligated to provide reparations for injuries caused by internationally wrongful acts has enjoyed formal judicial recognition since at least 1928, when the Permanent Court of International Justice issued its seminal *Factory at Chorzów* decision.¹¹⁹ Likewise, the ILC’s Draft Articles on the Responsibility of States for Internationally Wrongful Acts enshrine a responsible state’s “obligation to make full reparation for the injury caused by the internationally wrongful act.”¹²⁰ “Full reparation” requires compensation and, where possible, restitution, as well as satisfaction in the form of an acknowledgment of the wrong done and some expression of regret.¹²¹

III. “MISTAKES” IN THE U.S. COUNTERTERRORISM CAMPAIGN

The mistakes in war examined in the introduction have made international news and sparked debate about culpability when civilians are killed as a result of a mistake made during an armed conflict. But mistakes of this kind are not unusual. Indeed, they are a regular occurrence. There is ample evidence, in particular, that U.S. forces have made regular and repeated mistakes in U.S. counterterrorism campaigns. Those mistakes are often, but not always, acknowledged in civilian casualty assessments and have been documented by independent investigations. Those mistakes are common knowledge among those living in the countries and communities that are the

¹¹⁹ See *Factory at Chorzów* (Ger. v. Pol.), Judgment, 1928 P.C.I.J. (ser. A) No. 17, at 29 (Sept. 13).

¹²⁰ See Draft Articles, *supra* note 112, art. 31.

¹²¹ *Id.* arts. 34–37(2), 42; G.A. Res. 60/147, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law (Dec. 16, 2005).

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subject of U.S. strikes as well. Indeed, coalition airstrikes are perceived by local populations as often inaccurate and harmful to civilians.¹²² And yet, to our knowledge, U.S. service members have never been held criminally responsible. Here we review the evidence of “mistakes” that resulted in civilian deaths, as well as evidence that systemic, known system failures made civilian deaths not only likely, but inevitable.

A. Targeting

To understand recurring errors, we analyzed more than 1,300 of the U.S. military’s own civilian casualty assessments of claims of civilian harm from airstrikes in Iraq and Syria between September 2014 and January 2018. This trove of records, totaling more than 5,600 pages, was obtained by one of the authors of this Article, Azmat Khan, through a years-long lawsuit against the Department of Defense and U.S. Central Command under the Freedom of Information Act.¹²³

In 2016, President Barack Obama issued an executive order that required U.S. authorities to “review or investigate incidents involving civilian casualties” in U.S. operations involving the use of force, and “take measures” to mitigate the likelihood of future incidents of civilian casualties.¹²⁴ The order standardized a process for civilian casualty reviews and public reporting, particularly in Operation Inherent Resolve, the U.S.-led coalition’s battle against the Islamic State in Iraq and Syria. For each allegation of a civilian casualty resulting from a U.S. airstrike, coalition officials would conduct assessments of their credibility.¹²⁵ While those assessment records would not be

¹²² See, e.g., SMA CENTCOM Reach-back Reports Part 9: Coalition Views (Feb. 7, 2017), at 8, <http://nsiteam.com/social/wp-content/uploads/2017/02/Coalition-Views.pdf> (reporting that 58% of Iraqis surveyed “agree strongly” or “agree somewhat” that “coalition airstrikes are inaccurate and harm civilians”).

¹²³ See Complaint, *Azmat Khan v. U.S. Dept. of Defense*, Civil Action No. 18-5334 (June 13, 2018), <https://www.rcfp.org/wp-content/uploads/2022/01/2018-06-13-Khan-v.-DoD-Complaint-1.pdf>.

¹²⁴ Exec. Order No. 13732, 81 Fed. Reg. 44485 (July 1, 2016).

¹²⁵ See Department of Defense Combined Joint Task Force-Operation Inherent Resolve, Memorandum for See Distribution, Combined Joint Task Force-Operation Inherent Resolve (CJTTF-OIR) Policy for Reporting to Civilian Casualty Incidents (May 9, 2018),

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made public, the coalition would publish short summaries, often just a sentence long, stating whether an allegation on a particular date or location was deemed credible or non-credible.¹²⁶

Civilian casualty assessment records are the primary means through which the U.S. military tracks when airstrikes cause harm to civilians. Allegations can come from a variety of sources, from NGOs and social media posts to news reports and internal referrals. For example, if the unit conducting the strike spotted possible civilian casualties in footage, it could trigger a “self-reported” allegation. The majority of civilian casualty assessments examined were triggered by allegations submitted by the NGO Airwars.¹²⁷

Upon receiving an allegation of civilian harm, the U.S.-led coalition assesses the veracity of that claim and produces a report. Although they vary, the reports usually contain a background summary of the allegation, details about coalition strike activity on the date and in the general location in question, and a description of any strikes that may correspond to the allegation. That narrative often draws upon the strike’s target package, such as the underlying intelligence, the estimate of casualties anticipated before the strike was carried out, and actions taken to mitigate civilian harm, video footage that may have been taken before, during, and after the strike, and chat logs where those involved in the execution of the strike record each step of the process. Images drawn from civilian casualty reports released by the Department of Defense under FOIA litigation appear as Figure 1 below.

<https://int.nyt.com/data/documenttools/cjtf-oir-policy-civilian-casualty-incidents-2018/acd1dd219d5ba55b/full.pdf> (outlining reporting procedures for civilian casualty incidents).

¹²⁶ See, e.g., U.S. Central Command, Press Release: Combined Joint Task Force–Operation Inherent Resolve Monthly Civilian Casualty Report (July 7, 2017), <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1239870/combined-joint-task-force-operation-inherent-resolve-monthly-civilian-casualty/> (reporting 114 “non-credible” reports of civilian casualties, 27 “credible” reports, and 180 reports “still being assessed”).

¹²⁷ *US-led Coalition in Iraq & Syria*, AIRWARS, <https://airwars.org/conflict/coalition-in-iraq-and-syria/> (last visited Jan. 7, 2024).

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Figure 1: Civilian Casualty Assessment Record Excerpts¹²⁸

SECRET // REL TO USA, FVEY **REQUEST #70**

DEPARTMENT OF DEFENSE
HEADQUARTERS, 1ST INFANTRY DIVISION AND
COMBINED JOINT FORCES LAND COMPONENT COMMAND - OR
CAMP ARIFAN 9, BAGHDAD, IRAQ
AFL 48 8888

IRIZ-JA-OPL 14 April 2017

MEMORANDUM FOR CIVCAS Team, Combined Joint Task Force - Operation Inherent Resolve, Camp Arifan, APO, AE 09306

SUBJECT: CIVCAS Credibility Assessment Report (CCAR) (SIS C2 Node & UAS Launch Site) (CJFLCC-ORR 4317)

1. (S//REL-USA, FVEY) **Conclusion:** This allegation is CREDIBLE. A thorough review of all the available intelligence indicates that it is more likely than not that civilian casualties occurred as a result of this Coalition airstrike.

2. (S//REL-USA, FVEY) **Civilian Casualty Allegation:**

a. Source: Self-Report, Combined Joint Forces Land Component Command (CJFLCC), Combined Joint Operations Center - Erbil (CJOC-E), Camp Erbil, Erbil, Iraq, Mosul, Iraq (GRG B-57, MGRS [redacted]).

b. Time and Target Location: 30 March 2017, Ibn al Athir Neighborhood, Mosul, Iraq (GRG B-57, MGRS [redacted]).

c. Description: Observation of the two FMV feed disclosed the presence of several civilians and one vehicle in the area of the target at the moment of weapon impact. CJOC-E self-reported the potential for civilian casualties.

3. (S//REL-USA, FVEY) **Strike Narrative and Analysis:** The following is a chronological breakdown of the strike based on analysis of relevant mIRC logs, a post-strike FMV video, and post-strike assessments.

a. On 30 March 2017, CJOC-E prosecuted a target in the Ibn al Athir Neighborhood, of West Mosul based on sensitive reporting that an ISIS commander was staging and directing the movement and attack of VBIEDs in the area against FDPOL and EWD. Additionally, a historical [redacted] Report indicated that ISIS used the target as a VBIED location.

b. SCIF-N directed its ISR assets, [redacted] to observe the target location. While observing the target area, SCIF-N identified multiple ISIS fighters launching and recovering UAVs from the top of this structure. The CJOC-E TEA, determined that (1) the building was, to a reasonable certainty, used by ISIS as a C2 Node, (2) that the target was a valid military objective, and (3) that based on the imminence of more

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LICENTCOM FOIA 18-0262L TM: 117428208

SECRET // REL TO USA, FVEY

IRIZ-JA-OPL SUBJECT: CIVCAS Credibility Assessment Report (CCAR) (SIS C2 Node & UAS Launch Site) (CJFLCC-ORR 4317)

attacks from either VBIEDs or UAS from this location, the target met the standard for engagement under the collective self-defense provisions of the ROE.

c. CJOC-E directed [redacted] to engage the target facility with [redacted] munitions at [redacted]. ISR assets [redacted] conducted [redacted] scans prior to the engagement, and CJOC-E observed no civilians in their FMV feeds at the time of engagement authorization. [redacted] did not observe any transients at this time either. At approximately [redacted] [redacted] was alerted hot by the JTAC to prosecute the target. Weapons release occurred at [redacted] with an estimated [redacted] time of flight. Impact occurred at [redacted].

d. After weapons release, two transient civilians were observed to walk from an adjacent street into the collateral hazard area of the munition impact point. Additionally, one light truck was observed nearby, driving towards the target location. At impact, the two transients were within the collateral hazard area and were observed by CJOC-E to be harmed by the blast. The light truck is not observable in post-strike FMV, but was not observed at the time to exit the area. In the absence of further imagery it is not possible to determine whether or not the vehicle was affected by the strike.

e. A post-strike review by CJOC-E showed no indications of casualty evacuations or mortuary affairs actions by others within the area.

5. (S//REL-USA, FVEY) **Credibility Assessment:** Based on a thorough assessment of all reasonably available evidence, this CIVCAS allegation is deemed CREDIBLE. That is, it is more likely than not, that civilian casualties occurred as a consequence of this Coalition airstrike. This is based on:

a. The observation of two transients walking into the collateral hazard area of the munition impact points who were consumed by the blast of the weapons and fragmentation of the structure, and;

b. The transients were not observed leaving the target area post-strike.

6. The point of contact for this CIVCAS Credibility Assessment Report is the undersigned: [redacted]

[redacted]
Operational Law Attorney

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SECRET // REL TO USA, FVEY

LICENTCOM FOIA 18-0262L FE: 117428208

(S//REL-USA, FVEY) Figure 4: [redacted] for 1 Squirt from Group in Figure 3

SECRET // REL TO USA, FVEY

(S//REL-USA, FVEY) Figure 5: [redacted] for 5 EPAX

ENCLOSURE 3

this area is poppin

adm in kp 9 has his rifle leaning against wall beside him

JTAC - c

now he is firing south

additional 2 adms observed on roof

JTAC> play time?

> currently [redacted]

[redacted] adm ran into bldg under ch

next minut adm ran out of bldg

bldg slant [redacted]

EF BLDG: 385 LF 34373 24131

[redacted] cleared hot

[redacted] splash

BDA: 2 squirts one ran N across street, one ran back into tgt bldg

looks like splash hit bldg across the street, sb for grid

> target was ADM on that corner, just overshot

C

adm has crossed road S, and is walking W along road

SPLASH: 385 LF 34335 24150

[redacted] adm observed IVO of cnspd under CH

EF BLDG slant [redacted] 4-two adult males along the wall under ch

adm ran E across street

adm observed talking to 2nd adm on side of road,

additional adm in KP 6

all three adm spread along road spaced out leaning against wall

[redacted] adm crossed st to the N

same min 4 ADM's from W fov ran E

all males have rifles

door slant approx [redacted]

¹²⁸ The top images are from U.S. Dep't of Def., *Memorandum for CIVCAS Team* (April 14, 2017) [U.S. CENTCOM FOIA Request #70]. The bottom left image is from U.S. Dep't of Def., *CAOC Credibility Assessment* (May 29, 2016) [U.S. CENTCOM FOIA Request #19], <https://int.nyt.com/data/documenttools/c-5-29-16-iraq/abc83d8f0a27e362/full.pdf>. The bottom right image is from U.S. Dep't of Def., *CIVCA Credibility Assessment Report (CCAR) for [redacted]* (Jan. 17, 2018) [U.S. CENTCOM FOIA Request #4], <https://int.nyt.com/data/documenttools/c-1-13-17-iraq/21567223601ef02c/full.pdf>.

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If found “credible” by military investigators—meaning it is believed to be more likely than not that a civilian casualty occurred—a report is also likely to contain a review of whether or not that strike was found to comply with the rules of engagement and laws of armed conflict, whether any wrongdoing was found or any disciplinary action was recommended, and whether or not a condolence or *ex gratia* payment had been authorized.¹²⁹ At the end of an assessment, an officer can include recommendations or lessons learned, and may recommend whether any further investigation is necessary. If found to be “noncredible”—meaning military investigators were unable to determine that a strike caused civilian casualties—the report generally contains no further legal analysis or follow up.¹³⁰

Between 2017 and 2018, Khan filed FOIA requests for 1,390 assessments referenced in dozens of U.S. Central Command press releases between 2014 and 2018.¹³¹ After the agency failed to provide the records, she filed a lawsuit against CENTCOM and the Department of Defense in June 2018, represented by the Reporters Committee for Freedom of the Press.¹³² Over the next three years, she received tranches of records, culminating in more than 200 civilian casualty assessments deemed credible and 1,100 assessed to be “non-credible,” totaling more than 5,400 pages of assessments.¹³³

¹²⁹ *Assessments of Credible Reports*, N.Y. TIMES, <https://www.nytimes.com/interactive/2021/us/civilian-casualty-files.html#credible-reports> (collecting reports from cases where Cases in which military investigators deemed it “more likely than not” that a strike caused civilian casualties).

¹³⁰ *Assessments of Noncredible Reports*, N.Y. TIMES, <https://www.nytimes.com/interactive/2021/us/civilian-casualty-files.html#noncredible-reports> (collecting reports from cases in which military investigators were unable to determine, to the standard of “more likely than not,” that a strike caused civilian casualties).

¹³¹ See Complaint, *supra* note 123.

¹³² *Id.*

¹³³ Most, but not all, of these files are available at Khan et al., *The Civilian Casualty Files*, *supra* note 13. The lawsuit is still ongoing. For more on the process of obtaining the documents, see Azmat Khan & Adam Marshall on the Civilian Casualty Files, https://www.youtube.com/watch?v=o_t3s1E5gCo.

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Most of these records were made public through “The Civilian Casualty Files,” published in *The New York Times* in December 2021,¹³⁴ along with stories that analyzed the documents¹³⁵ and compared Coalition assessments to reporting on the ground in Iraq and Syria at the sites of sixty incidents deemed “credible” and three dozen others deemed “noncredible” or not yet assessed.¹³⁶ In the thirty-five instances where it was possible to locate the precise impact area and find and interview survivors and witnesses on the ground, the reporting also included “touring wreckage; collecting photo and video evidence; and verifying casualties through death certificates, government IDs and hospital records.”¹³⁷

The authors of this Article and a team of research assistants examined these records to identify cases where “mistakes” were the apparent cause of the civilian death. We reviewed the civilian casualty assessments deemed credible by the Department of Defense and met to discuss patterns that emerged from a qualitative assessment of the reports. In general, our determinations were based on reading these civilian casualty assessments alone, but we also compared those assessments to available public sources that corresponded to the event, such as information collected by Airwars about civilian infrastructure and civilian presence at the targeted site.¹³⁸ In some cases, Khan also conducted on-the-ground reporting on the incidents to assess the accuracy of the information contained in the casualty assessment records, which are cited in published reporting.¹³⁹ We identify where we rely on these alternative sources of information.

¹³⁴ *Id.*

¹³⁵ See, e.g., Azmat Khan, *Hidden Pentagon Records Reveal Patterns of Failure in Deadly Airstrikes*, N.Y. TIMES (Dec. 18, 2021), <https://www.nytimes.com/interactive/2021/12/18/us/airstrikes-pentagon-records-civilian-deaths.html>.

¹³⁶ Azmat Khan, *The Human Toll of America’s Air Wars*, N.Y. TIMES MAG. (Dec. 19, 2021), <https://www.nytimes.com/2021/12/19/magazine/victims-airstrikes-middle-east-civilians.html>.

¹³⁷ Khan, *Hidden Pentagon Records*, *supra* note 135.

¹³⁸ AIRWARS, *supra* note 127.

¹³⁹ The news accounts produced using this reporting can be found at Khan et al., *The Civilian Casualty Files*, *supra* note 13. Greater detail about

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It is important to note at the outset the limitations of these data. To begin with, our approach is, if anything, likely to undercount mistakes, as it relies only on the strikes involving civilian casualties where the Department deemed civilian casualties more likely than not occurred. Those assessments are sometimes made on the basis of incomplete information and thus do not reflect reality on the ground. Indeed, ground reporting has frequently identified cases where reports of civilian casualties deemed “noncredible” in fact led to deaths of civilians.¹⁴⁰ Moreover, this information is limited in time and space: It focuses on strikes by U.S. forces in Iraq and Syria from September 2014 to January 2018.¹⁴¹ Nonetheless, it reflects the most comprehensive source of relevant data available to date. We supplement this behind-the-scenes information with publicly reported incidents, to provide a broader picture of the scope of mistakes in war.

1. *Target Misidentification*

A frequent cause of civilian deaths was target misidentification, when military personnel incorrectly identified civilians as combatants, often by interpreting relatively ordinary actions as having hostile intent. The *New York Times* found that while misidentification was involved in only 4 percent of cases deemed credible by the military, “[a]t the casualty sites visited by The Times, misidentification was a major factor in 17 percent of incidents.”¹⁴² These incidents “accounted for nearly a third of civilian deaths and injuries” among the incidents deemed credible.¹⁴³

Perhaps the most high profile example of target misidentification is the August 2021 U.S. drone strike in Kabul, Afghanistan, which killed an Afghan aid worker as he pulled

the process of ground reporting can be found at Khan, *The Human Toll of America’s Air Wars*, *supra* note 136.

¹⁴⁰ Khan, *Hidden Pentagon Records*, *supra* note 135; Azmat Khan & Anand Gopal, *The Uncounted*, N.Y. TIMES MAG. (Nov. 16, 2017), <https://www.nytimes.com/interactive/2017/11/16/magazine/uncounted-civilian-casualties-iraq-airstrikes.html>.

¹⁴¹ Khan et al., *The Civilian Casualty Files*, *supra* note 13.

¹⁴² Khan, *Hidden Pentagon Records*, *supra* note 135.

¹⁴³ *Id.*

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into his family home.¹⁴⁴ An investigation into the incident¹⁴⁵ revealed that ordinary actions—such as “gingerly loading” a package into the vehicle, or stopping at a Taliban checkpoint, or opening and shutting a gate behind the vehicle—were all interpreted as evidence of an ISIS-K attack plot.¹⁴⁶

The DoD’s civilian casualty records also reveal numerous instances in which ordinary actions were perceived as threats. For example, a review of an airstrike in Mosul on September 21, 2015, on two civilian homes that killed four civilians and injured two others, including family members of a Yale professor,¹⁴⁷ was based on activities that the targeteers had determined indicated that “ISIL controlled the facility.”¹⁴⁸ The information relied on to determine that the target was a “Joint Coordination Center” was based in part on the presence of “up to 7 adult males outside the villa,” some of whom opened and closed a gate for arriving vehicles, “indicating some access control.”¹⁴⁹ No weapons were observed, but the report noted that “ISIL does not obviously brandish weapons to remain from being detected, so the fact weapons were not observed would not have been considered unusual.”¹⁵⁰ Post-strike analysis determined that “[p]otentially more FMV [full motion video] may have identified the presence

¹⁴⁴ Khan, *Military Investigation Reveals How the U.S. Botched a Drone Strike in Kabul*, *supra* note 8.

¹⁴⁵ *Id.*; U.S. Dep’t of Def., *Findings and Recommendations for Army Regulation (AR) 15-6 Investigation – Civilian Casualty Incident, Kabul, 29 August 2021* (Sept. 8, 2021) [U.S. CENTCOM FOIA #21-0518], <https://int.nyt.com/data/documenttools/kabul-strike-investigation-ar15-6/189578e886367589/full.pdf>.

¹⁴⁶ Unless otherwise noted, all examples in this Part are drawn from information gathered from the civilian casualty assessment records provided in footnotes. All quotes describing the incident are drawn from the identified civilian casualty assessment record unless otherwise specified.

¹⁴⁷ U.S. Dep’t of Def., *CAOC CIVCAS Credibility Assessment – 21 September 2015* (Feb. 13, 2017) [U.S. CENTCOM FOIA Request #38], <https://int.nyt.com/data/documenttools/c-9-20-15-iraq/2688c41b14591157/full.pdf> (noting that the investigation was prompted in part by a *New York Times* story by Zareena Grewal, a Yale University Professor, who claimed that the airstrike killed her husband’s cousin (himself a university professor), his 17-year-old son, another cousin’s wife and her 21-year-old daughter; two other family members were gravely injured).

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

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of women and domestic activity; however, what was observed provided confidence that the facility was not occupied by a family.”¹⁵¹ It continued, “Due to the equipment error there is no recording of the FMV that can be reviewed.”¹⁵²

Misidentification can be the result of “confirmation bias” by targeteers, who may interpret limited information to confirm pre-existing beliefs about a threat. In November 2016, a special operations task force looking for an explosives factory north of Raqqa observed a walled compound where operators identified “white bags” they assessed to be ammonium nitrate.¹⁵³ The force targeted a truck that departed from the compound, resulting in what operators identified as secondary explosions. Those “secondary explosions” were seen as confirmation that the trucks were carrying ammonium nitrate and led to approval to strike three buildings in the compound. A post-strike civilian casualty assessment found no ammonium nitrate and no secondary explosions. Instead, because the vehicle was hit near a building, it “reflected effects in a manner that gave the appearance of secondary effects.”¹⁵⁴ One of the “squirters” was a child.¹⁵⁵ “The target was more likely a cotton gin than a [homemade explosives] factory,” the analysts concluded, conceding only two civilians were killed.¹⁵⁶ No full investigation was recommended on the basis that it would not “illuminate any new information or lessons learned.”¹⁵⁷

Children were also killed as a result of misidentification. The U.S. military’s own documents explicitly acknowledge killing or injuring children in 27% of incidents deemed credible by the Pentagon, but in the ground sample it was more than twice that, 62%, raising questions about the military’s ability to

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ U.S. Dep’t of Def., *Credibility Assessment of Alleged CIVCAS on 21 November 2015 IVO Raqqah, Syria* (Dec. 22, 2016) [U.S. CENTCOM FOIA Request #31], <https://int.nyt.com/data/documenttools/c-11-21-16-syria/36cd07bf12a0447f/full.pdf>.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.* The task force that carried out the strike, the report notes, maintained that the gin was a legitimate target, citing an AFP news story as evidence that ISIS had taken control of three quarters of the cotton production in Syria, which provided important revenue to the group. *Id.*

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accurately identify the impacts of its airstrikes on children.¹⁵⁸ In several cases, this failure appeared to be the result of an inability to distinguish children from inanimate objects. For example, in a November 2015 strike on an ISIS “defensive fighting position” in Ramadi, Iraq, a subsequent review revealed that an “unknown heavy object” being dragged into a building was actually “a person of small stature,” “consistent with how a child would appear standing next to an adult.”¹⁵⁹ Other assessment records revealed repeated examples of this confusion, such as a July 2016 airstrike in Manbij, Syria, in which two adult males were seen “fleeing the strike site, one carrying a larger object and one carrying a smaller object,” which post-strike analysts concluded were “potentially a child and infant.”¹⁶⁰

2. *Failure to Detect Presence of Civilians*

The failure to detect the presence of civilians before a strike was a leading factor involved in a majority of casualties among sites visited on the ground. The *New York Times* found this to be a factor “in a fifth of the cases in the Pentagon documents, and a slightly smaller fraction of the casualties.”¹⁶¹ Yet “it accounted for 37 percent of credible cases, and nearly three-fourths of the total civilian deaths and injuries at the sites visited by The Times.”¹⁶²

Repeatedly, the military incorrectly assessed that there were no civilians in the target area, that a target was exclusively used by ISIS and was no longer used by civilians, or that ground and partner forces did not disclose civilian presence in the vicinity of a target. Often, it relied on a few seconds of collateral

¹⁵⁸ Khan, *Hidden Pentagon Records*, *supra* note 135.

¹⁵⁹ U.S. Dep’t of Def., *Memorandum for Record Concerning Potential Civilian Casualty (CIVCAS)* (Nov. 30, 2015) [U.S. CENTCOM FOIA Request #32], <https://int.nyt.com/data/documenttools/c-11-12-15-iraq/2e4b36b01ff29d5a/full.pdf>.

¹⁶⁰ U.S. Dep’t of Def., *CIVCAS Tracker Allegation Number 207* (Nov. 15, 2017) [U.S. CENTCOM FOIA Request #20], <https://int.nyt.com/data/documenttools/c-7-10-16-syria/9ac41019d3efc009/full.pdf>.

¹⁶¹ Khan, *Hidden Pentagon Records*, *supra* note 135.

¹⁶² *Id.*

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scans to determine that civilians were not in the area, rather than extended surveillance over a period of time.

Sites that would have been on restricted targeting lists, such as hospitals or businesses that civilians frequented, were often removed from those lists after the military incorrectly assessed that civilians were no longer using them. For example, a hospital in Mosul was removed from a restricted targeting list after the military concluded civilians left the area and the facility was only being used as an ISIS headquarters and media propaganda center.¹⁶³ The week before the strike, however, it observed images of children “interacting” with the facility, and determined that conducting the strike at night would “alleviate collateral concerns.”¹⁶⁴ The credibility assessment concluded that “at least four civilians were killed and six civilians were injured in strike,” including two children.¹⁶⁵

A failure to detect the presence of civilians was frequently rooted in poor or outdated intelligence. For example, as U.S.-backed forces prepared to invade Tabqa, Syria, in March of 2017, military officials greenlit a series of targets intended to degrade ISIS: two headquarters, a weapons factory, and a police station.¹⁶⁶ The sites had been identified as potential targets long ago, but the military had decided that waiting to carry out the strikes until Syrian Democratic Forces were pushing their way into Tabqa would provide the greatest strategic advantage. The targets were approved in a final review on March 16th and carried out two days later. Each went as planned, according to initial assessments of the damage. But when claims of civilian casualties triggered a closer look at the underlying intelligence, things started to fall apart.¹⁶⁷

¹⁶³ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve APO, AE 09306* (Apr. 25, 2017) [U.S. CENTCOM FOIA Request #90], <https://int.nyt.com/data/documenttools/c-2-18-17-iraq/b7249994dc5fca11/full.pdf>.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* at 4.

¹⁶⁶ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve APO, AE 09306* (July 13, 2017) [U.S. CENTCOM FOIA Request #139], <https://int.nyt.com/data/documenttools/c-3-20-17-syria/393b2ddb6e2a1250/full.pdf>.

¹⁶⁷ *Id.*

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The intelligence for one of the “headquarters” was based on a single report from October 2016, almost six months before the strike, which reported that the ISIS Emir of Security had frequented the location.¹⁶⁸ The intelligence package warned that no surveillance video on the target (“no FMV [full motion video] on target”), that there was “insufficient intel to assess [redacted].”¹⁶⁹ There was little to corroborate the claim that the target was exclusively used by ISIS, a claim that was later used to justify removing it from a no-strike list.¹⁷⁰ Similarly, the second headquarters was also deemed exclusively used by ISIS, which was also unsupported by the underlying intelligence examined, according to the review. Despite occurring in densely populated areas with residential structures nearby, little footage was taken of the sites before or after the strikes, which the military could have used to assess civilian presence. Only one minute of footage was taken of the first headquarters target before and after the strike,¹⁷¹ and less than two minutes of the second, which the report noted was “an insufficient duration, resolution, and proximity to the target to assess the presence of civilian or enemy activity in the immediate area before or after weapons impact.”¹⁷² What is more, only one of the locations of the targets had been correctly included in the strike database, so only one battle damage assessment was available for review. The civilian casualty assessment concluded that ten civilians were killed in the strikes.¹⁷³

A review of the other two targets covered in the same assessment also raised serious questions about the quality of intelligence. The intelligence packages for the weapons factory were ten and twenty-eight months old and revealed that it had previously functioned as a bakery and food distribution center. Similarly, the characterization of exclusive use by ISIS was “unsupported by the information in the background intelligence product” that “civilians were possibly at these locations.”¹⁷⁴ The final target, an ISIS police station, had previously functioned as

¹⁶⁸ *Id.* at 2.

¹⁶⁹ *Id.* at 3.

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at 3.

¹⁷² *Id.* at 7.

¹⁷³ *Id.* at 9.

¹⁷⁴ *Id.* at 3 & 4.

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a fire station, according to the underlying intelligence, which dated back to September 2016 and January 2017.¹⁷⁵

Although detailed allegations appeared online, including graphic photos and videos of casualties from a firehouse and bakery in Tabqa,¹⁷⁶ the Coalition rejected claims of casualties in the two strikes above on the basis that there was “insufficient evidence.”¹⁷⁷ It based its conclusions largely on what it was able to observe in strike videos. No footage of the strike on the ISIS police station was available to review. Only two minutes of footage was taken after the strike on the weapons factory, and although “no human activity was observed,” the report acknowledges that heat and smoke obscured the area.¹⁷⁸

3. *Secondary Explosions*

Failing to detect the presence of civilians was particularly deadly when targeting weapons caches or other targets with potential for secondary explosions, which the military’s collateral damage estimates often failed to predict. Such explosions often went far beyond the “expected” blast radius. The *New York Times* found that “they accounted for nearly a third of all civilian casualties acknowledged by the military and half of all civilian deaths and injuries at the sites visited by The Times.”¹⁷⁹

In March 2017, in one particularly tragic example, the U.S. conducted an airstrike in the al-Jadida neighborhood of West Mosul targeting two ISIS snipers on a roof who were engaging partner forces. The precision-guided munitions detonated on the second floor of the building, igniting explosive materials that “triggered a rapid failure of the structure” and killed “at least 101 civilians sheltered in the bottom floors of the structure,” according to a subsequent Pentagon investigation.¹⁸⁰

¹⁷⁵ *Id.* at 8.

¹⁷⁶ *CS590 Assessment*, AIRWARS (incident date March 19, 2017), <https://airwars.org/civilian-casualties/cs590-march-19-2017>.

¹⁷⁷ U.S. Dep’t of Def., *Memorandum for CIVCAS Team*, *supra* note 166, at 9.

¹⁷⁸ *Id.* at 5.

¹⁷⁹ Khan, *Hidden Pentagon Records*, *supra* note 135.

¹⁸⁰ U.S. Dep’t of Def., *Executive Summary of Army Regulation 15-6 Investigation of the Alleged Civilian Mass Casualty Incident in the al Jadidah*

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In its investigation into the bombing—the only incident in the records in which U.S. military officials visited the site on the ground to collect evidence—the military stated that the Target Engagement Authority “was unaware of and could not have predicted the presence of civilians in the structure prior to the engagement.”¹⁸¹ The inquiry found no wrongdoing and concluded the operation “balanced the military necessity of neutralizing two ISIS snipers with the potential for collateral damage to civilians.”¹⁸²

Efforts to target large Vehicle Borne Improvised Explosive Device (VBIED) facilities proved particularly problematic, with targeteers and weapons experts asked to deliver “unrealistic” assessments of casualties by employing weapons that were not suitable for the job, thereby limiting the blast radius and making the target “executable.”¹⁸³ For example, a June 2015 military-planned nighttime bombing of a car bomb factory in Hawija, Iraq, ripped through the city’s industrial district, around which many Iraqis displaced by violence and who could not afford rent were living—a fact unknown to the military.¹⁸⁴ According to a military investigation into the incident, as many as 70 civilians were killed, 111 buildings were destroyed, 75 “sustained severe damage” and 86 “moderate damage.”¹⁸⁵ The intelligence before the strike anticipated the nearest “collateral concern” to be a “shed.”¹⁸⁶ The anticipated number of civilian deaths was zero. Although the U.S. vetted and planned this strike, the Dutch Air Force dropped the

District, City of Mosul, Ninewah Governate, on or About 17 March 2017 (May 8, 2017) [U.S. CENTCOM FOIAs #17-0529 & #17-0625], <https://int.nyt.com/data/documenttools/c-3-17-17-iraq/4fd4000fcb95a110/full.pdf>.

¹⁸¹ *Id.*

¹⁸² *Id.*

¹⁸³ U.S. Dep’t of Def., *Al Hawijah ISIL VBIED Factory Strike, 02 June 2015* (2015) [U.S. CENTCOM FOIA #19-0014L], <https://int.nyt.com/data/documenttools/c-6-2-15-iraq/055d09f8f8b256a4/full.pdf>.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

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bombs.¹⁸⁷ Although a full investigation was conducted in the months after the strike, its findings were never made public—because the Dutch Defence Minister worked to suppress it.¹⁸⁸ The cover-up spurred a parliamentary special hearing in the Netherlands and captivated the Dutch public.¹⁸⁹

In the investigation documents, military personnel described how unreasonable demands to make the strike “executable” likely resulted in the use of weapons that triggered the secondary explosions. The U.S. Air Force Chief of Targets stated the following in the assessment record:

My targeteers actually spent hours working and reworking this target just to make the CDE [collateral damage estimate] ‘executable,’ which has been a standard practice in this conflict. CDE concerns compete directly against the desired kinetic effects, so we are typically asked to destroy the target as much as possible within the restriction of CDE.¹⁹⁰

While the reach of secondary explosions are notoriously hard to predict, re-working targets to provide unreasonably low expected casualties became standard practice in the war against ISIS.¹⁹¹ If the casualty estimate was too high, targeteers would be asked to recommend using “weapons with smaller collateral effects radius” to get a lower casualty estimate, according to officials’ statements.¹⁹² “However the trade-off is that the targeteer will have to spend more time dropping more aimpoints, use more weapons, or possibly use a weapon that is

¹⁸⁷ *Dutch Admit Botched Airstrike Killed Civilians*, Deutsche Welle (DW) (Nov. 4, 2019), <https://www.dw.com/en/netherlands-admits-killing-up-to-70-civilians-in-botched-airstrike-in-iraq/a-51109053>.

¹⁸⁸ Belkis Wille, *New Revelations on Dutch Role in Deadly Iraq Attack*, Human Rights Watch (Nov. 13, 2019), <https://www.hrw.org/news/2019/11/13/new-revelations-dutch-role-deadly-iraq-attack>.

¹⁸⁹ Saba Azeem, Lauren Gould, Erin Bijl & Jolle Demmers, *After the Strike* (Apr. 8, 2022), <https://protectionofcivilians.org/report/after-the-strike/>.

¹⁹⁰ U.S. Dep’t of Def., *Al Hawijah ISIL VBIED Factory Strike, 02 June 2015*, *supra* note 183, at 064.

¹⁹¹ *Id.*

¹⁹² *Id.* at 074

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not ideal to achieve the desired effects on the target,” wrote a target development expert in the investigation.¹⁹³ “Throughout OIR [Operation Inherent Resolve], a common trend is that the customer wants complete structural destruction of buildings, but they also want a CDE Low call,” according to a Target Development expert in the investigation records.¹⁹⁴

This demonstrates not only the problems involved in calculating proportionality analysis when secondary explosions are involved but also how a strike can kill civilians while everyone involved can tell themselves they are not responsible: The targeteer might feel like the commander forced them to provide an unrealistic estimate of expected casualties. The commander can believe that they authorized a strike that was within acceptable thresholds and acted on what they believed was good information. Everyone can persuade themselves that any mistakes were caused by flaws in the targeting package or intelligence shortfalls that failed to identify the presence of secondaries. Civilians die and everyone can persuade themselves, and others, that they are not to blame.

Many incidents involving secondary explosions involved a target for which the military could have anticipated such explosions. For example, a December 2016 airstrike on a “weapons cache” in Mosul resulted in secondaries that set a nearby home ablaze, killing eight civilians.¹⁹⁵ Similarly, an April 2015 strike on an electricity substation that the military assessed to be an IED factory in the Aden neighborhood of East Mosul killed 18 civilians and injured at least a dozen more.¹⁹⁶

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (Mar. 7, 2017) [U.S. CENTCOM FOIA Request #44], <https://int.nyt.com/data/documenttools/c-12-11-16-iraq/459e15293c570ab4/full.pdf>.

¹⁹⁶ U.S. Dep’t of Def., *Memorandum for Record* (Oct. 25, 2016) [U.S. CENTCOM FOIA Request #17], <https://int.nyt.com/data/documenttools/nc-4-20-15-iraq/dc5d1f764a876b57/full.pdf>. While the military initially deemed these civilian casualty allegations “non-credible,” it changed its assessment to “credible” after Azmat Khan’s reporting in the *New York Times Magazine*. Khan & Gopal, *The Uncounted*, *supra* note 141; U.S. Dep’t of Def., *Review of CIVCAS Credibility Assessment Report (CCAR) for Allegation 2001, Adan, Mosul, Iraq, 20 April 2015* (Apr. 24, 2018) (on file with authors).

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However, at other times the U.S. military was unaware of the presence of a weapons cache *and* unaware of the presence of civilians in the target area. This toxic combination produced the earlier-described 2017 airstrike targeting two ISIS snipers in the al Jadida neighborhood of Mosul, a strike that became the largest civilian casualty incident the military has admitted in its counterterrorism campaign in Iraq.¹⁹⁷ Not only did the U.S. military not know of the presence of civilians sheltering in the building, but it was also unaware of the presence of a weapons cache. The secondary explosion triggered a “rapid failure of the structure, killing the two ISIS snipers and 101 civilians sheltered in the bottom floors of the structure,” together with an additional four civilians in a neighboring building.¹⁹⁸ Rather than admit shortcomings, the report turned around its lack of knowledge to allege that ISIS had baited the U.S. into the strike to set off secondaries: “ISIS fighters . . . within the structure staged a large secondary device and intentionally drew ISF and Coalition fires onto [the building] with the objective of endangering civilians.”¹⁹⁹ It even coined a new term—“CIVCAS [civilian casualty] entrapment”—to describe the phenomenon.²⁰⁰

4. *Civilian Entered Target Area After Weapon Released*

The kinds of civilian casualties the military is most apt to identify independently are civilians that entered the target frame after a weapon was released. The *New York Times* found that “[m]ore than half of the cases the military deemed credible involved someone entering the target frame in the moments between a weapon’s firing and impact,” but that these deaths accounted for 10 percent of acknowledged civilian casualties.²⁰¹

For example, a February 2017 strike on a vehicle killed one man walking on a road where an ISIS vehicle was

¹⁹⁷ See *supra* text accompany notes 180-182.

¹⁹⁸ U.S. Dep’t of Def., *Alleged Civilian Mass Casualty Incident in the al Jadidah District*, *supra* note 192, at 1.

¹⁹⁹ *Id.* at 1.

²⁰⁰ *Id.* at 7.

²⁰¹ Khan, *Hidden Pentagon Records*, *supra* note 135.

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traveling.²⁰² Similarly, shrapnel from a March 2017 strike killed a man pushing a cart down a road near an ISIS mortar tube.²⁰³ One civilian casualty assessment even includes recommendations on how such incidents might be prevented in the future. After a strike targeting a “high value individual” at a funeral in Mosul killed two civilians, the assessment noted that their “presence in the target area could not be predicted to reasonable certainty,” while also recommending an additional surveillance aircraft to provide a wider view of people who might enter the target area.²⁰⁴ However, the intense scale and pace of the air campaign, particularly during the battles to re-take Mosul and Raqqa, meant that there was a shortage of available surveillance drones. With surveillance drones in such high demand, they could only conduct limited pre-strike footage and post-strike analysis.

5. *Pre-Strike Proportionality Assessment Errors*

At least a quarter of all casualties involved situations that raised questions about how the decision was made before a strike that the expected harm would be proportional to the military advantage gained.²⁰⁵

For example, a November 2016 strike leveled a house in an effort to kill two fighters who had attempted to enter the compound, killing eight members of a family hiding inside it—

²⁰² U.S. Dep’t of Def., *Memorandum for Record* (Mar. 31, 2017) [U.S. CENTCOM FOIA Request #47], <https://int.nyt.com/data/documenttools/c-2-22-17-iraq/c4f7edef58b860fc/full.pdf>.

²⁰³ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (Apr. 11, 2017) [U.S. CENTCOM FOIA Request #68], <https://int.nyt.com/data/documenttools/c-3-21-17-iraq/58673bcd79abcf83/full.pdf>.

²⁰⁴ U.S. Dep’t of Def., *Memorandum for Record* (Mar. 29, 2017) [U.S. CENTCOM FOIA Request #45], <https://int.nyt.com/data/documenttools/c-2-9-17-iraq/e9f35204a497f76f/full.pdf>. In this case, due to the high value of the target, both air assets were used to zoom in on the individual, rather than zoom out on the scene. *Id.*

²⁰⁵ Author's calculations, based on documents in Assessments of Credible Reports, *supra* note 129.

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including a week-old baby—and injuring a dozen others.²⁰⁶ In another incident, a three-story building was targeted twice in order to target a running fighter.²⁰⁷ In these instances, the military likely relied on collateral scans to conclude that civilians were not in the area. In doing so, they did not account for the fact that the coalition and its partner forces had provided guidance to civilians in the neighborhood to shelter at home, making it less likely they would be picked up in those scans.²⁰⁸

In other instances, pre-strike proportionality assessments incorrectly identified children as “transient,” merely passing through the area, rather than living there. In March of 2016, the coalition evaluated a proposed target in a residential neighborhood of West Mosul believed to be a chemical weapons production facility.²⁰⁹ In pre-strike surveillance footage, ten children were seen playing near the target. The military classified the children as transients, concluding that conducting the bombing at night would mitigate the threat to them.²¹⁰ But during the target validation meeting, one participant disagreed with the assessment.²¹¹ Based on local customs about where children are allowed to play, she believed the children lived in or near the compound.²¹² The strike proceeded nonetheless, and not long after, the burned and bloody corpses of children appeared in photos online, which the coalition matched to the strike site.²¹³ The civilian casualty assessment, excerpts of which appear in Figure 2, assessed the

²⁰⁶ U.S. Dep’t of Def., *Memorandum for Record* (Mar. 29, 2017) [U.S. CENTCOM FOIA Request #43], <https://int.nyt.com/data/documenttools/c-11-18-16-iraq/e560cbb34bcc1a72/full.pdf>.

²⁰⁷ U.S. Dep’t of Def., *CIVCAS Credibility Assessment Report* (Jan. 17, 2017) [U.S. CENTCOM FOIA Request #4], <https://int.nyt.com/data/documenttools/c-1-13-17-iraq/21567223601ef02c/full.pdf>.

²⁰⁸ *Iraq Urges Residents in Daesh-Held Areas to Shelter at Home*, THE JORDAN TIMES (Apr. 6, 2017), <https://jordantimes.com/news/region/iraq-urges-residents-daesh-held-areas-shelter-home>.

²⁰⁹ U.S. CENTCOM, CAOC CIVCAS Credibility Assessment 5 March 2016 [U.S. CENTCOM FOIA Request #13], at 11, <https://int.nyt.com/data/documenttools/c-3-5-16-iraq/aa459cbd379ca87b/full.pdf>.

²¹⁰ *Id.* at 11.

²¹¹ *Id.*

²¹² *Id.* at 3.

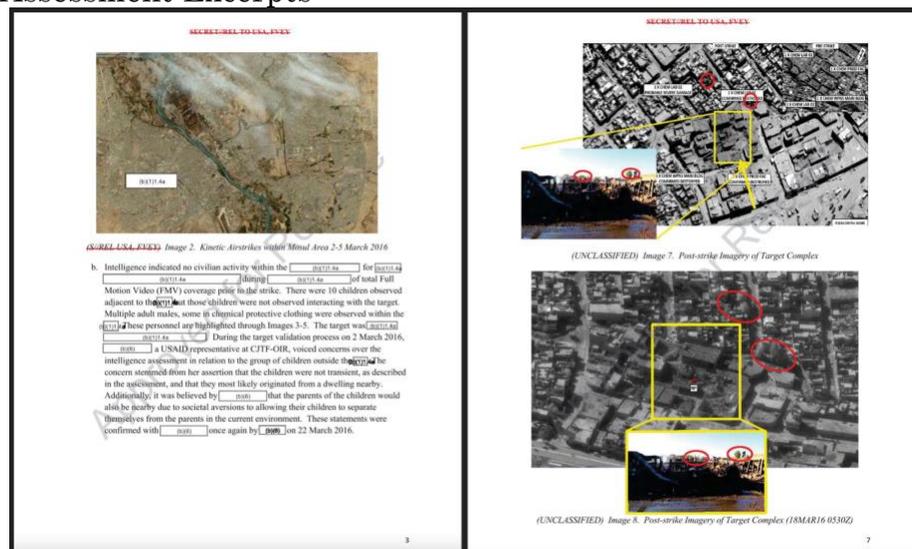
²¹³ *Id.* at 5.

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allegation that 10 children were killed to be credible.²¹⁴ Nonetheless, the assessment concluded that “the Coalition fully complied with the LOW [law of war] and, in face[sic], went beyond what is required in terms of harm mitigation.”²¹⁵

Visiting the site, the *New York Times* found that 21 civilian family members were killed in the strike, including 11-year-old Sawsan Zeidan, who was later identified by her father.²¹⁶ “If it weren’t for her clothes, I wouldn’t have even known it was her,” he told the *New York Times*. “She was just pieces of meat. I recognized her only because she was wearing the purple dress that I bought for her a few days before.”²¹⁷

Figure 2: March 5, 2016 Civilian Casualty Credibility Assessment Excerpts²¹⁸



Pre-strike proportionality questions also arose in the choice of a particular weapon, such as a November 2016 airstrike on an ISIS vehicle in the Shahid-Yunis As Sab neighborhood of Mosul.²¹⁹ In addition to failing to conduct

²¹⁴ *Id.* at 11.

²¹⁵ *Id.*

²¹⁶ Khan, *The Human Toll of America’s Air Wars*, *supra* note 136.

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ U.S. Dep’t of Def., *Memorandum for Commander, Combined Joint Land Forces Component Command – Operation Inherent Resolve (CJFLCC-OIR), Baghdad, Iraq, APO AE 09348* (Nov. 16, 2016) [U.S. CENTCOM FOIA

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appropriate collateral scans that would have allowed the military to identify two other civilian cars passing by the target, the military chose to use larger munitions than necessary in order to “save” lower collateral weapons for later.²²⁰ “The selection of munitions was made having regard to the possibility that low collateral weapons would be required for future strikes during the period the ISR [intelligence, surveillance, and reconnaissance] asset was on station,” the assessment noted.²²¹ “While this approach did not fall foul of any legal requirement, or issued policy or procedures, this should not properly be the predominant factor weighed by the commander when making their assessment of proportionality for the strike.”²²²

Other questions about pre-strike proportionality determinations arose in instances in which military operators revised their pre-strike assessment to enable the strike. For example, in March 2017, shortly before military planners were about to strike a home they believed was exclusively being used by ISIS as a “bed down location,” three children were spotted on the roof.²²³ The strike package was returned to the targeting team for further evaluation. The next day, the target’s “casualty estimation worksheet”²²⁴ was updated: Three children, who probably lived there, were now included, but the target was also updated. Rather than an ISIS bed down location, the target was now classified as a weapons manufacturing facility, a target of higher value that could justify a strike without review by a higher authority despite the higher expected collateral damage due to the presence of children.²²⁵ The target proceeded, and in

Request #9), <https://int.nyt.com/data/documenttools/c-11-6-16-iraq/c215e99f24013fa9/full.pdf>.

²²⁰ *Id.*

²²¹ *Id.*

²²² *Id.*

²²³ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (Feb. 2, 2017) [U.S. CENTCOM FOIA Request #39], <https://int.nyt.com/data/documenttools/c-1-30-17-iraq/6747b75e76514e83/full.pdf>.

²²⁴ *Id.*

²²⁵ At the time of the strike, strikes below a non-combatant cutoff value (NCV) did not require approval by a higher authority, but those above did. Chairman of the Joint Chiefs of Staff Instruction, CJCSI 3160.01 (Fen. 13, 2009), <https://www.justsecurity.org/wp->

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post-strike footage, screeners saw “one possible child” who was “carried out of the strike location,” loaded into a vehicle and driven to a medical facility.²²⁶ Visiting the site on the ground, *The New York Times* was unable to find evidence of an ISIS target at the impact site, but it did find that twelve civilians were killed and that an ISIS bed down location *across the street* from the targeted house was not impacted by the strike.²²⁷

In at least four instances, the military targeted “high-value individuals” whose presence justified a strike despite the presence of civilians, but then later learned that they either were not present at the target or that they had survived the strike. For example, in the Spring of 2016, the U.S. targeted notorious Australian ISIS recruiter Neil Prakash²²⁸ in East Mosul.²²⁹ American officials confirmed his death to Australian authorities,²³⁰ and assessed that four civilians were killed when the weapon struck three civilians on the road and one civilian located on an adjacent compound. Several months after the bombing, however, Prakash was found alive, attempting to cross into Turkey,²³¹ where he was held by Turkish authorities before

content/uploads/2017/04/Collateral-Damage-Estimation-Methodology-CJCSI.pdf. The United States military discontinued the use of NCVs in 2018, thus loosening the requirement for review for strikes with higher collateral damage estimates. *See* Pentagon Removed Non-Combatant Casualty Cut-Off Value from Doctrine in 2018, *Defense Daily* (June 11, 2021), <https://www.defensedaily.com/pentagon-removed-non-combatant-casualty-cut-off-value-doctrine-2018/pentagon/>.

²²⁶ *Id.*

²²⁷ Khan, *The Human Toll of America’s Air Wars*, *supra* note 136.

²²⁸ U.S. Cent. Command, *U.S. Central Command Releases Iraq and Syria Civilian Casualty Assessments* (July 28, 2016), <https://int.nyt.com/data/documenttools/press-release-7-28-2016/ac5d1e410ab95fa9/full.pdf>.

²²⁹ U.S. Dep’t of Def., *Untitled Civilian Casualty Assessment Report* (Sept. 18, 2018) [U.S. CENTCOM FOIA Request #28], <https://int.nyt.com/data/documenttools/c-4-29-16-iraq/efe101afe16dfb11/full.pdf>.

²³⁰ Michael Safi & Paul Karp, *Neil Prakash, Most Senior Australian Fighting with ISIS, Killed in Iraq Airstrike*, *THE GUARDIAN* (May 4, 2016), <https://www.theguardian.com/australia-news/2016/may/05/neil-prakash-most-senior-australian-fighting-with-isis-killed-in-iraq-airstrike>.

²³¹ Rachel Olding, David Wroe & Nino Bucci, *Australian Terrorist Neil Prakash Arrested in Turkey*, *SYDNEY MORNING HERALD* (Nov. 25, 2016), <https://www.smh.com.au/national/australian-terrorist-neil-prakash-arrested-in-middle-east-reports-20161125-gsxnpm.html>.

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being extradited to Australia in late 2022.²³² The bombing severely disabled Hassan Alewi Muhammad Sultan, then just 11, who had been playing nearby.²³³ X-rays show shrapnel in his spinal cord. His family can barely afford the wheelchair he’s in, let alone the medical care he requires.²³⁴

Similarly, an April 2017 strike targeting “ISIS War Minister” Gulmurod Khalimov from Tajikistan in Mosul,²³⁵ a July 2015 strike on an unidentified high value individual,²³⁶ and an April 2016 strike targeting an ISIS financial emir²³⁷ all failed to kill the intended targets. In each incident, the military acknowledged civilian casualties.

B. Investigations of Civilian Casualties

A review of more than 215 credible and 1,100 non-credible assessments found systematic deficiencies in how allegations of civilian casualties were evaluated, and an absence of effort to include the causes of casualties or recommendations and lessons learned that would help prevent future casualties. The systemic failures to learn from mistakes came about because of several key failures: over-reliance on video footage, failure to reassess in light of credible new information, reliance on units to investigate themselves, inadequate familiarity with the geography and

²³² Australian Associated Press, *Neil Prakash, Accused Islamic State Jihadist, to be Extradited to Victoria to Face Terrorism Charges*, THE GUARDIAN (Dec. 1, 2022), <https://www.theguardian.com/australia-news/2022/dec/02/neil-prakash-accused-islamic-state-jihadist-lands-in-australia-to-face-terrorism-charges>.

²³³ Khan, *The Human Toll of America’s Air Wars*, *supra* note 136.

²³⁴ *Id.*

²³⁵ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (April 17, 2017) [U.S. CENTCOM FOIA Request #72], <https://int.nyt.com/data/documenttools/c-4-4-17-iraq/0c6ceeb560bbdb67/full.pdf>.

²³⁶ U.S. Dep’t of Def., *CIVCAS Tracker Allegation Number 62* (Oct. 30, 2018) [U.S. CENTCOM FOIA Request #8], <https://int.nyt.com/data/documenttools/c-7-27-15-iraq/e19742697f070d6b/full.pdf>.

²³⁷ U.S. Dep’t of Def., *CIVCAS Assessment Report (05 APR 16 – Mosul, Iraq)* (Apr. 20, 2016) [U.S. CENTCOM FOIA Request #26], <https://int.nyt.com/data/documenttools/c-4-5-16-iraq/a65ead1ba5363509/full.pdf>.

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culture of targeted areas, and structural features of the civilian casualty assessments themselves.

Across these categories, we find that even in incidents the U.S. military deems credible, it has vastly undercounted the true death toll. The numbers of civilian casualties verified on the ground by the *New York Times* were nearly double that acknowledged by the coalition in assessments.²³⁸ In addition, and perhaps unsurprisingly, the documents do not identify survivors who suffer from serious disabilities as a result of the strikes, but in the ground sample, 40% of credible incidents resulted in severe disabilities.

Strikingly, despite the problems outlined below, just under 12 percent of credible incidents triggered full investigations, and only a quarter included some kind of further review, recommendations, or lessons learned.²³⁹ There was not a single instance of disciplinary action, and only one “potential” violation of the rules of engagement, which involved a breach of positive identification procedure.²⁴⁰

1. *Over-Reliance on Inadequate Video Footage*

The military relies almost entirely on video footage in its after-action assessments. Video footage of strikes were often the primary piece of evidence used to determine whether civilian casualties occurred—despite numerous problems with the quantity and quality of that footage. On average, strike footage was often only seconds or minutes long, hardly sufficient time to see survivors to make their way out of a collapsed building or for rescuers to retrieve bodies. (Often, people would wait before approaching a bombed area to rescue civilians, out of fear that they would be hit again, an occurrence so frequent it is known within the military as a “double tap.”) Frequently, the footage was obscured by smoke, or casualties were not visible inside buildings or underneath tarp and garage covers. At times, there

²³⁸ Khan, *Hidden Pentagon Records*, *supra* note 135. The discrepancy would be even larger, but the *New York Times*’s own count of civilian casualties did not include civilians who were the wives and children of ISIS fighters because their “information was difficult to verify.” *Id.*

²³⁹ *Id.*

²⁴⁰ *Id.*

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was no footage at all available for review, which was the basis for rejecting the allegation.

One reason that the information is often inadequate is that the post-strike video footage is not taken for the purpose of assessing civilian casualties. The video is taken as part of the battle damage assessment (BDA) process—a process designed to ascertain whether or not the U.S. military has effectively employed force against the enemy. As a matter of course, no one is tasked with proactively assessing civilian harm. It is often only after an allegation of civilian death is made that the impact of the strike on civilians is assessed. That is particularly true where pre-strike analysis suggests that there are no civilians in the vicinity—an assessment that is, the evidence suggests, often inaccurate.

In only one incident identified in the more than 1,300 formerly secret military records we reviewed for this Article did military officials visit the site of a strike to investigate the claim of civilian casualties,²⁴¹ and only in one more did it directly interview survivors or eyewitnesses,²⁴² despite many efforts by journalists and others to connect the assessment team with interviewees.

One former high-level official in the U.S. military admitted that the reporting of one of the authors of this Article, Azmat Khan, was the first time they had the chance to learn what they had misidentified and to learn how they had misjudged the civilian toll of the strike. He said:

Inside the military, you would almost never know [that you misidentified the target or the proportionality estimate was wrong]. Because no one in the military did the work that you did. You were maybe the only person in the world, or the only person in this war, that took the military's information and you'd go to those places to see,

²⁴¹ U.S. Dep't of Def., *Alleged Civilian Mass Casualty Incident in the al Jadidah District*, *supra* note 192.

²⁴² U.S. Dep't of Def., *Executive Summary of Allegations of Civilian Casualties (CIVCAS) Resulting from October 5, 2015 strike in the Vicinity of Atshanah, Iraq* (Dec. 22, 2015) [U.S. CENTCOM FOIA Request #30], <https://int.nyt.com/data/documenttools/c-10-5-15-iraq/19aede3ab89c7f55/full.pdf>.

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literally what is the ground truth. In the military, nobody is ever doing that. We’re never on the ground, the battle itself is moving so fast. It's not as if you have teams that follow up behind putting together those reports that you did, talking to all these people in the neighborhoods and asking them these questions, search down the grandmother in this town. Nobody's doing that except for you.²⁴³

The reliance on inadequate video footage in post-strike assessments sometimes leads the U.S. military to determine that a civilian casualty report is noncredible simply due to the absence of what the military deems reliable information confirming the civilian casualty report. For example, after Airwars submitted online allegations of civilian casualties at a firehouse and bakery in Tabqa, Syria, in March 2017, the military deemed the strike non-credible in a press release on the basis that after reviewing “available information and the strike video” there was “insufficient evidence to find civilians were harmed.”²⁴⁴ However, the actual assessment noted there was *no footage available* of the strike on the former firehouse, which the military assessed to now function as an ISIS police station.²⁴⁵ Additionally, “no human activity was observed” in the footage of the strike on the former bakery, which the military assessed to now be a weapons factory, but the footage was only two minutes long and obscured by “heat and smoke” from the surrounding

²⁴³ Interview by Azmat Khan with a high-ranking official in the U.S. military (speaking on the condition of anonymity).

²⁴⁴ *Combined Joint Task Force - Operation Inherent Resolve Monthly Civilian Casualty Report*, U.S. CENT. COMMAND (Nov. 29, 2018), <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1701240/combined-joint-task-force-operation-inherent-resolve-monthly-civilian-casualty/> (“8. Mar. 19, 2017, near Tabaqah, Syria, via Airwars report. After a review of available information and the strike video, it was assessed that there is insufficient evidence to find civilians were harmed in this strike.”).

²⁴⁵ U.S. Dep’t of Def., *Civilian Casualty Assessment Report for Allegation 389, Tabaqah Syria, 19 March 2017* (July 13, 2017) [U.S. CENTCOM FOIA Request #139], <https://int.nyt.com/data/documenttools/c-3-20-17-syria/393b2ddb6e2a1250/full.pdf>.

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target.²⁴⁶ Despite also finding numerous shortcomings with the intelligence behind the strikes, both allegations were found non-credible.

Similarly, a review of allegations that a February 20, 2017 strike in al-Bab, Syria, killed 12 civilians found three strikes in the area, but because there were no chat logs or footage from them, the assessment officer concluded “this allegation should be closed without further action.”²⁴⁷ The press release announcing the finding stated only that there was “insufficient information available to determine if civilians were present or harmed in this strike.”²⁴⁸ The statement did not mention that it was the military’s own information that was insufficient.²⁴⁹

When footage was unavailable to review, it was often due to “equipment error,”²⁵⁰ because no aircraft “observed or recorded the strike,”²⁵¹ or because the unit could not or would not locate the footage, or had not properly preserved it, as was required by the military’s standard operating procedures. For example, during a review of a February 2017 strike in Mosul,²⁵² the officer was only able to obtain a few seconds of footage from strikes on what was assessed to be an IED factory in West

²⁴⁶ *Id.*

²⁴⁷ U.S. Dep’t of Def., *Memorandum for Record* (Apr. 23, 2017) [U.S. CENTCOM FOIA Request #8], <https://int.nyt.com/data/documenttools/nc-2-20-17-syria/75656373eb466e5c/full.pdf>.

²⁴⁸ *Combined Joint Task Force - Operation Inherent Resolve Monthly Civilian Casualty Report*, U.S. CENT. COMMAND (June 2, 2017), <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1201013/combined-joint-task-force-operation-inherent-resolve-monthly-civilian-casualty/>.

²⁴⁹ *Id.*

²⁵⁰ U.S. Dep’t of Def., *CAOC CIVCAS Credibility Assessment – 21 September 2015*, *supra* note 148.

²⁵¹ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (Nov. 4, 2017) [U.S. CENTCOM FOIA Request #164], <https://int.nyt.com/data/documenttools/c-3-20-17-syria/06b9e2f5861a5c5a/full.pdf>.

²⁵² U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (Apr. 25, 2017) [U.S. CENTCOM FOIA Request #94], <https://int.nyt.com/data/documenttools/c-2-28-17-iraq/ee79e0f6e71b4f79/full.pdf>.

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Mosul. The footage did not show casualties, and the officer was about to deem it non-credible, but after “several repeated attempts” finally was able to obtain the footage, which showed civilians impacted by the blast.²⁵³ “Had this video not eventually be[en] obtained, I would have determined that the video is no longer available,” the officer wrote, and “there would have been insufficient evidence” to deem it credible.²⁵⁴ The assessor recommended that the existing standard operating procedures requiring preservation of all evidence that could potentially substantiate a civilian casualty claim be implemented.²⁵⁵

Even when footage was available, unless civilians were explicitly observable, they were often not counted. For example, after the first strike on a mortar position near Mosul University in November 2016 did not appear to eliminate the target, a second strike was authorized.²⁵⁶ After weapons had been released, operators noticed a fire truck approaching the targeted area, parking 10 meters away. Three men were visible near the target. After the second strike hit, one of them was seen laying down. Another inspected something behind the fire truck. Eventually, all three men are seen walking away. The report noted that the footage reviewed did not show “four unresponsive individuals” or an ambulance, as first alleged by the Combined Air Operations Center in Qatar, which reported the allegation.²⁵⁷ “Even if there was injury or death,” the report noted, “there is also inadequate information to determine these individuals’ statuses as either enemy combatants or civilians.”²⁵⁸

In other cases, the U.S. military rejected allegations even when there was compelling evidence of casualties simply because the claim’s details did not exactly correspond with the footage and imagery. For example, the DoD rejected an Airwars

²⁵³ *Id.*

²⁵⁴ *Id.*

²⁵⁵ *Id.*

²⁵⁶ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (Nov. 26, 2016) [U.S. CENTCOM FOIA Request #11], <https://int.nyt.com/data/documenttools/nc-11-22-16-iraq/3c6096a1d4d83fe7/full.pdf>.

²⁵⁷ *Id.*

²⁵⁸ *Id.*

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allegation that a strike in the Aden district of East Mosul in April 2015 killed dozens of civilians who were trying to rescue others, because of “discrepancies in eyewitness accounts.”²⁵⁹ Despite accurately identifying that three strikes took place on an electricity substation, an eyewitness stated that the third munition was dropped a quarter of an hour after the second, and did not explode, which was “inconsistent” with the military’s imagery, strike report, and battle damage assessment.²⁶⁰ “I assess that it is possible that a potential CIVCAS [civilian casualty] incident occurred as a result” of the strike, the officer wrote.²⁶¹ “However, given the discrepancies in the eyewitness accounts, I have determined that it is not more likely than not that the alleged CIVCAS were caused by Coalition personnel.”²⁶² In the public press release, the military stated that there was “insufficient evidence to find that civilians were harmed in this strike.”²⁶³

This incident was later deemed credible after one of the authors of this Article visited the site following a report submitted to the Coalition by Airwars based in part on extensive online evidence, including “graphic videos of the strike’s aftermath on YouTube, showing blood-soaked toddlers and children with their legs ripped off.”²⁶⁴ She determined that at least 18 civilians were killed, and more than a dozen others wounded, reporting published in *The New York Times Magazine* cover story “The Uncounted.”²⁶⁵ The *Times* reported that Muthana Ahmed Tuaama, a university student, “told us his brother rushed into the blaze to rescue the wounded, when a

²⁵⁹ U.S. Dep’t of Def., *Memorandum for Record* (Oct. 25, 2016), *supra* note 196, at 4.

²⁶⁰ *Id.* at 2.

²⁶¹ *Id.* at 1.

²⁶² *Id.* at 4.

²⁶³ *Combined Joint Task Force – Operation Inherent Resolve Monthly Civilian Casualty Report*, U.S. CENT. COMMAND (July 7, 2017), <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1239870/combined-joint-task-force-operation-inherent-resolve-monthly-civilian-casualty/> (“17. April 20, 2015, near Adan, Iraq, via Airwars report: After a review of available information and strike video it was assessed that there is insufficient evidence to find that civilians were harmed in this strike.”).

²⁶⁴ Khan & Gopal, *The Uncounted*, *supra* note 141.

²⁶⁵ *Id.*

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second blast shook the facility.” He found his brother and carried him. “Body parts littered the alleyway. ‘You see those puddles of water,’ he said. ‘It was just like that, but full of blood.’”²⁶⁶ Despite ultimately acknowledging the 18 civilian deaths, the U.S. military did not admit any civilians were wounded.²⁶⁷

Even in instances deemed credible, the military often undercounted death tolls because video taken from the air often does not show people inside buildings; people under aluminum or tarp covers known as qamaria that protect cars and market stalls from the sun; people under foliage; people inside cars; or people obscured by smoke after the blast or other obstructions based on the vantage point of the camera. For example, the military concluded that a June 2016 airstrike targeting an ISIS target on a motorcycle injured two civilians in the impact area who were identified in footage taken before the strike.²⁶⁸ Yet independent ground reporting found the bombing killed five civilians and injured four others, most of whom were in areas that would have not been visible in the footage taken before or after the strike.²⁶⁹

Most assessments never even reached a stage where footage was pulled for review. Often, this was because the military could not locate a strike in the time and place in question in its logs, or because there were too many strikes in a particular area to warrant a review—even when the claims were extremely strong. For example, the military rejected an Airwars allegation of casualties near Rahm Al Ali Hospital in Mosul Jadida on March 17, 2017—some of the war’s largest civilian casualty claims—because without the exact time of day there was “no way to accurately narrow down the strikes that

²⁶⁶ *Id.*

²⁶⁷ *Combined Joint Task Force – Operation Inherent Resolve Monthly Civilian Casualty Report*, U.S. CENT. COMMAND (June 28, 2018), <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1562287/combined-joint-task-force-operation-inherent-resolve-monthly-civilian-casualty/>.

²⁶⁸ U.S. Dep’t of Def., *Untitled Civilian Casualty Assessment Report* (Sept. 18, 2018) [U.S. CENTCOM FOIA Request #21], <https://int.nyt.com/data/documenttools/c-6-15-16-iraq/be7caf2bfdfe9be8/full.pdf>.

²⁶⁹ Khan, *Hidden Pentagon Records*, *supra* note 135.

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may potentially corroborate the allegation.”²⁷⁰ This was despite the fact that the allegation was one of the largest civilian casualty claims of the war. About a quarter of all allegations deemed non-credible were closed because they lacked sufficient information or detail to assess it, such as a specific location or 48-hour date range. But the overwhelming majority, more than half, were rejected because the military could find no record of strikes in the geographic area identified in the allegation.²⁷¹

2. *Incomplete or Inaccurate Strike Logs*

The military determines whether it has a record of any strikes in a particular place by searching for any corresponding strikes in official logs maintained by different strike authorities. But journalists have repeatedly uncovered instances in which the strike logs were incomplete or inaccurate, a problem that appears to be known by assessment experts, according to some of the records, with one officer noting that the “[s]trike log is not accurate and shouldn't be used to identify strikes.”²⁷²

For example, the military logged coordinates for an airstrike it concluded resulted in eight civilian deaths and twenty civilians injured on April 19, 2016, near Mosul, Iraq.²⁷³ The location provided by the military to Airwars was in West Mosul, near the Sihah neighborhood.²⁷⁴ During a ground visit to that site in June, residents reported that there was no such

²⁷⁰ U.S. Dep't of Def., *CIVCAS Cell Initial Assessment* (May 6, 2019) [U.S. CENTCOM FOIA Request #15], <https://int.nyt.com/data/documenttools/nc-3-17-17-iraq/25e5b94a569947e8/full.pdf>.

²⁷¹ Author's calculations, based on documents in Assessments of Credible Reports, *supra* note 129.

²⁷² U.S. Dep't of Def., *CIVCAS Tracker Allegation Number 488* (Nov. 12, 2018) [U.S. CENTCOM FOIA Request #140], <https://int.nyt.com/data/documenttools/c-6-25-17-syria/14cd6054fc579a8a/full.pdf>.

²⁷³ U.S. Dep't of Def., *CIVCAS Tracker Allegation Number 651* (Nov. 14, 2018) [U.S. CENTCOM FOIA Request #85], <https://int.nyt.com/data/documenttools/c-4-19-16-iraq/84c6937dd8d727a6/full.pdf>.

²⁷⁴ *CI229 Assessment*, AIRWARS, <https://airwars.org/civilian-casualties/ci229-april-19-2016/>.

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strike in that area.²⁷⁵ The assessment record for this incident,²⁷⁶ however, identifies the target as a power supply structure in Al Hadba Apartment Complex. That complex is well-known to many in the city, and is located in East Mosul, on the other side of the city, more than eight kilometers away from the logged coordinate.²⁷⁷

Similarly, the coordinate the military provided Airwars²⁷⁸ for a March 5, 2016, strike against what it assessed to be an ISIS weapons production facility that resulted in the deaths of ten civilians was actually more than two kilometers from the actual impact site identified in the assessment.²⁷⁹ A detailed examination of satellite imagery of other logged coordinates casts further doubt on their accuracy. For example, satellite imagery of the location provided to Airwars²⁸⁰ for a November 21, 2016, strike of what was believed to be a homemade explosives factory—but was later assessed as a cotton gin during a civilian casualty review²⁸¹—depicts a field near the Syrian town of al Bogeleyyah, north of Der-Ez-Zour. Images from months before the strike into the present day reveal no structures or buildings within a 400-meter radius of the point. The military claimed to Airwars that the accuracy of its coordinate was within 100 meters.²⁸² The document for the

²⁷⁵ This is based on an in person visit to the site on June 21, 2021 by Khan. That visit, though not these details, was mentioned in Azmat Khan et al, Documents Reveal Basic Flaws in Pentagon Dismissals of Civilian Casualty Claims, N.Y. TIMES (Dec. 31, 2021), <https://www.nytimes.com/2021/12/31/us/pentagon-airstrikes-syria-iraq.html>.

²⁷⁶ U.S. Dep’t of Def., *CIVCAS Tracker Allegation Number 651*, *supra* note 274.

²⁷⁷ This is based on an in person visit to the East Mosul site on June 22, 2021 by Khan, not reflected in published reporting.

²⁷⁸ *CI197 Assessment*, AIRWARS, <https://airwars.org/civilian-casualties/ci197-march-5-2016/>.

²⁷⁹ U.S. Dep’t of Def., *CAOC CIVCAS Credibility Assessment 5 March 2016* (July 4, 2016) [U.S. CENTCOM FOIA Request #13], <https://int.nyt.com/data/documenttools/c-3-5-16-iraq/aa459cbd379ca87b/full.pdf>.

²⁸⁰ *CS383 Assessment*, AIRWARS, <https://airwars.org/civilian-casualties/cs383-november-21-2016/> (last visited Jan. 8, 2024).

²⁸¹ U.S. Dep’t of Def., *Credibility Assessment of Alleged CIVCAS on 21 November 2015 IVO Raqqah, Syria*, *supra* note 153.

²⁸² *CS383 Assessment*, AIRWARS, *supra* note 279.

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incident describes the target as eleven kilometers north of Raqqa,²⁸³ but the coordinate provided by the military is more than 100 kilometers southeast of Raqqa.

Inadequate strike logs often resulted in allegations being rejected without proper assessment. At times, after initially being rejected on the grounds that there was no record of a strike in a particular location, a separate allegation for the same incident would be dubbed credible. For example, the military rejected an allegation that a strike on residential structures in Al Shifa neighborhood in Mosul on February 19, 2017, killed dozens of civilians on the basis that there were no strikes in that neighborhood in the time period in question.²⁸⁴ That was incorrect, and a subsequent allegation was opened into the incident.²⁸⁵ The document noted that despite observing numerous collateral concerns and the presence of civilians entering a building assessed to be an ISIS headquarters in Al Shifa, the ultimate casualty estimate used to make the strike executable was based on a time period of surveillance when no civilians were observed. The military concluded ten civilians were killed, but ground reporting found the death toll was even higher.²⁸⁶ The strike targeted an apartment complex near the Tahir Church in Mosul where both ISIS members and civilians lived. Down the street was a residential complex where ISIS members’ families lived. The attack on the first complex triggered the explosion of a fuel truck near the second, resulting in fire that consumed the second complex. *The New York Times* documented the deaths of twenty civilians in and around the first building.²⁸⁷ Dozens of others in the second building burned to death or were severely injured.²⁸⁸

²⁸³ U.S. Dep’t of Def., *Credibility Assessment of Alleged CIVCAS on 21 November 2015 IVO Raqqah, Syria*, *supra* note 153.

²⁸⁴ U.S. Dep’t of Def., *Memorandum for Record* (Mar. 29, 2017) [U.S. CENTCOM FOIA Request #12], <https://int.nyt.com/data/documenttools/nc-2-19-17-iraq/4b6a6d98bf06a13f/full.pdf>.

²⁸⁵ U.S. Dep’t of Def., *Memorandum for CIVCAS Team, Combined Joint Task Force – Operation Inherent Resolve, APO, AE 09306* (April 21, 2017) [U.S. CENTCOM FOIA Request #92], <https://int.nyt.com/data/documenttools/c-2-19-17-iraq/716dd276af68737e/full.pdf>.

²⁸⁶ Khan, *The Human Toll of America’s Air Wars*, *supra* note 136.

²⁸⁷ *Id.*

²⁸⁸ *Id.*

*“Mistakes” in War*3. *Failure to Account for New Credible Information*

After denying assessments for insufficient information, the military would often fail to re-open assessments after receiving new information. A January 10, 2017 airstrike on a home in Mosul’s Dhubat neighborhood that killed three civilians in eastern Mosul was first reported to the coalition by Airwars on July 2, 2017.²⁸⁹ The military rejected the report on the basis that the allegation contained “insufficient information of the time, location and details to assess its credibility.”²⁹⁰ The *New York Times* then followed up, providing the exact location and dozens of pages of evidence to the U.S. military, before reporting on the incident in November, 2017.²⁹¹ Even then, and even after multiple follow ups from the *New York Times* regarding the incident, the military did not reopen its investigation until late 2018. In 2020, it rejected the civilian casualty allegation on the basis that “no Coalition actions were conducted in the geographical area that corresponds to the report of civilian casualties,”²⁹² even though U.S. Air Forces Central Command assessment experts in Qatar had determined that a coalition strike fell thirty meters from the GPS coordinates provided.²⁹³

Airwars found a similar pattern.²⁹⁴ Despite repeatedly providing the U.S. military with responses to requests for

²⁸⁹ *CI407 Assessment*, AIRWARS (incident date January 9-10, 2017), <https://airwars.org/civilian-casualties/ci407-january-9-2017/> (last visited Jan. 8, 2024); Khan & Gopal, *The Uncounted*, *supra* note 141.

²⁹⁰ U.S. Dep’t of Def., *0711 CIVCAS Cell Initial Assessment Allegation #816* (Sept. 22, 2017) [U.S. CENTCOM FOIA Request #17], <https://int.nyt.com/data/documenttools/nc-1-9-17-iraq/7389eb22a27b68c4/full.pdf>.

²⁹¹ Khan & Gopal, *The Uncounted*, *supra* note 141.

²⁹² *Combined Joint Task Force – Operation Inherent Resolve Monthly Civilian Casualty Report*, OPERATION INHERENT RESOLVE (Feb. 13, 2020), <https://web.archive.org/web/20200818143340/>.

²⁹³ See Email from Lt Col Danien Pickart, to Azmat Khan 11 (May 23, 2017) (responding to request for information about strike with inline comment: “PROBABLE - nearest strike was approx 30 meters away on 1/10/2017 against a known ISIS weapons cache”).

²⁹⁴ Joe Dyke, Imogen Piper and Sanjana Varghese, *In Many Cases, Our Attempt to Help US Track Civilian Deaths Went Nowhere*, RESPONSIBLE STATECRAFT (Feb. 21, 2022), <https://responsiblestatecraft.org/2022/02/21/in-many-cases-our-attempts-to-help-us-track-civilian-deaths-went-nowhere/>.

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additional information over the years and providing new or updated information, Airwars found that the “Coalition sometimes closed assessments before we had even provided our feedback, or did not reopen them when new information was provided.”²⁹⁵

4. *Relying on Units to Investigate Themselves*

In many civilian casualty incidents, the investigation is carried out by the very same unit that carried out the strike. Perhaps as a result, many documents produced during a civilian casualty assessment include bare bones information about the basis for the assessment. For example, an assessment of a December 2016 airstrike near Raqqa included a single paragraph stating that the special operations unit looked at its strikes in the area and found “no evidence of possible civilian casualties,” with no further information nor details from the footage.²⁹⁶ These kinds of omissions as well as redactions and missing documents were most associated with Task Force 9, a special operations unit supporting the SDF in Syria.²⁹⁷ There were apparently no consequences for turning over such limited information.

The reliance on units to do their own investigations means that it can be difficult for those outside the units to detect bad practices within them. In other countries, special operations units have been found to have committed terrible abuses that went undetected for years. The Brereton Report, the result of a four-year investigation into abuses by Australian special operations forces in Afghanistan, found the unlawful killing of thirty-nine individuals by twenty-five current or former Australian Defense Force (ADF) personnel.²⁹⁸ The Special Air

²⁹⁵ *Id.*

²⁹⁶ U.S. Dep’t of Def., *CIVCAS Tracker Allegation #293* (Jan. 25, 2017) [U.S. CENTCOM FOIA Request #3], <https://int.nyt.com/data/documenttools/nc-12-22-16-syria/19ccea1d87cde3dc/full.pdf>.

²⁹⁷ Dave Phillipps, Eric Schmitt & Mark Mazzetti, *Civilian Deaths Mounted as Secret Unit Pounded ISIS*, N.Y. TIMES (Dec. 12, 2021), <https://www.nytimes.com/2021/12/12/us/civilian-deaths-war-isis.html>.

²⁹⁸ Paul Brereton, *Inspector-General of the Australian Defence Force Afghanistan Inquiry Report*, AUSTRALIAN DEFENCE FORCE (2020),

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Service second squadron of the ADF was later disbanded as a result.²⁹⁹ A similar investigation has begun into U.K. special forces deployed to Afghanistan.³⁰⁰ In both cases, it appears that the insular culture of the special operations forces produced a culture of silence that made it hard for those outside the units to detect the violations taking place until the scale of the abuses made it blatantly obvious even to outsiders.

5. Inadequate Familiarity with Targeted Areas and Failure to Obtain Public Information

The military often rejected allegations because they were unable to locate the neighborhood,³⁰¹ citing insufficient information.³⁰² At other times, assessment officers displayed a failure to obtain public information that could be found from simple internet searches, a lack of attention to detail, inadequate Arabic language skills, and significant misunderstandings of local culture that led them to reject allegations.

For example, after social media reports alleged that a January 2017 airstrike on a funeral in al Shifa neighborhood in West Mosul killed civilians, the coalition opened an initial

<https://www.defence.gov.au/sites/default/files/2021-10/IGADF-Afghanistan-Inquiry-Public-Release-Version.pdf>.

²⁹⁹ Paul Osborne, *SAS Squadron Disbanded over Afghanistan Claims in Brereton Report*, 7NEWS (Nov. 18, 2020), <https://7news.com.au/news/conflict/sas-squadron-disbanded-over-afghan-claims-c-1610257>.

³⁰⁰ James Joseph, *UK Ministry of Defense Confirms UK Special Forces at Center of Afghanistan War Crimes Inquiry*, JURIST (July 6, 2023), <https://www.jurist.org/news/2023/07/uk-ministry-of-defense-confirms-uk-special-forces-at-center-of-afghanistan-war-crimes-inquiry/>.

³⁰¹ For examples of such assessments, see U.S. Dep’t of Def., *CIVCAS Cell Initial Assessment Allegation #1641* (Jan. 2, 2018) [U.S. CENTCOM FOIA Request #23], <https://int.nyt.com/data/documenttools/nc-6-13-17-syria/62e11408e030d077/full.pdf>; U.S. Dep’t of Def., *CIVCAS Cell Initial Assessment Allegation #1704* (Jan. 23, 2018) [U.S. CENTCOM FOIA Request #48], <https://int.nyt.com/data/documenttools/nc-6-20-17-syria/792609b20b6d4167/full.pdf>.

³⁰² Azmat Khan et al, *Documents Reveal Basic Flaws in Pentagon Dismissals of Civilian Casualty Claims*, N.Y. TIMES (Dec. 31, 2022), <https://www.nytimes.com/2021/12/31/us/pentagon-airstrikes-syria-iraq.html>.

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assessment.³⁰³ Although the allegation included graphic video taken from the site of the strike, a thumbnail of which depicted the entrance of a house, the officer only searched logs for potentially corroborating strikes in the cemetery closest to the neighborhood. However, as reflected in the video, the strike did not take place at a cemetery, and Muslim funerals are rarely held at cemeteries. Because the officer found no strikes in the cemetery on the date in question, the allegation was closed at the initial assessment.³⁰⁴ Although the assessment did not include a review of video, the press release identifying the incident as non-credible stated the following: “After a review of available information and strike video it was assessed that there is insufficient information available to determine if civilians were present or harmed in this strike.”³⁰⁵

6. *Structural Features of Civilian Casualty Assessments*

Beyond counting, little about the way assessments are conducted suggests a true effort to follow standard operating procedures that would allow the military to identify proximate causes, lessons learned, or overall trends in why casualties are happening.

Aggregate reviews to study trends in civilian casualty assessments are constrained by the structure of the assessments and the way in which they are preserved. It would be difficult to analyze causes in aggregate because civilian casualty assessments are not structured in a manner that would allow an officer to, for example, check particular boxes to identify factors involved. Records are often incomplete, missing attachments, or were never entered into formal systems.³⁰⁶ During the years-

³⁰³ U.S. Dep’t of Def., *CIVCAS Cell Initial Assessment Allegation #840* (Sept. 6, 2017) [U.S. CENTCOM FOIA Request #6], <https://int.nyt.com/data/documenttools/nc-1-17-17-iraq/60907646e396a0db/full.pdf>.

³⁰⁴ *Id.*

³⁰⁵ *Combined Joint Task Force – Operation Inherent Resolve Monthly Civilian Casualty Report*, U.S. CENT. COMMAND (Apr. 30, 2017), <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1167729/combined-joint-task-force-operation-inherent-resolve-monthly-civilian-casualty/>.

³⁰⁶ Khan, *Hidden Pentagon Records*, *supra* note 135.

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long legal battle for these records, CENTCOM often provided incomplete or partial records, and reported that it was unable to locate many full investigations.³⁰⁷ Some of the records were located with Special Operations Command (SOCOM), but many remain missing. Some records provided in response to the FOIA requests were never included in public releases.

IV. LEARNING FROM MISTAKES³⁰⁸

This Article has identified two broad kinds of “mistakes” in war that have led to unnecessary and unjustified civilian deaths. The first is an individual or unit failing—an individual or unit acts recklessly, that is, they decide to take a lethal action with conscious and unjustifiable disregard of a known or obvious risk to civilians. When civilians are killed, that failure is too often dismissed as a “mistake.” Examples include the downing of MH17, the shootdown of the Ukrainian Airliner over Tehran, and perhaps the Kunduz Hospital strike. The second type of mistakes are systemic mistakes. Here, whereas the individual event may not meet the standard for recklessness, the pattern of mistakes is the result of a series of choices that creates unnecessary risk. In targeting, it is not inevitable that civilians will die in significant numbers as a result of misidentification, failure to detect the presence of civilians, unanticipated secondary explosions, failure to anticipate the entry of civilians

³⁰⁷ In email correspondence between 2018 and 2023, the Assistant District Attorney identified multiple cases in which CENTCOM and SOCOM were unable to locate records. Among records provided, Khan found records that were cited but were incomplete or missing from the production, such as closure reports, CCARs, full investigations, or requested exhibits. Of 130 records included in the Vaughn Index in 2023, Khan identified records that were either incomplete or missing in 68 incidents, or more than half of the records in the index. In January 2024, after examining the cases cited in the index, CENTCOM identified additional records that had been requested, but not processed. According to the AUSA, “CENTCOM has now reviewed your questions on the draft index in detail. CENTCOM has identified approximately 580 pages of records, including CCARs and exhibits, that were requested but not previously processed.” Email from Adam Marshall, Reporters Committee for Freedom of the Press, to Azmat Khan (Jan. 17, 2024) (on file with authors) (quoting response from the AUSA). Those records are now being processed.

³⁰⁸ As noted above, Khan did not contribute to this section to respect the boundaries of her role as a journalist.

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into the target area, and pre-strike proportionality assessment errors. Many of these systemic mistakes can be anticipated—and thus avoided. The failure to take reasonable measures to identify and learn from those mistakes is itself an act of recklessness, putting civilians at unnecessary risk.

Here we offer proposals for addressing individual and systemic “mistakes” through changes in both U.S. law and the law of armed conflict. In doing so, we acknowledge that there is a scholarly debate about whether the effort to make war humane makes war more palatable to the public and thus more likely. Samuel Moyn’s book, *Humane*, puts the argument this way:

The American way of war is more and more defined by near complete immunity from harm for one side and unprecedented care when it comes to killing people on the other. It is informed by the standards of international law that constrain fighting. Most remarkably, America’s military operations have become more expansive in scope and perpetual in time *by virtue of these very facts*.³⁰⁹

An implication of this argument is that reducing mistakes in war would contribute to this dynamic, making war more antiseptic and thus more palatable. Yet, there is little evidence that the news of mistakes in war—even grave ones leading to mass casualties—have done much to reduce political support for U.S. counterterrorism operations abroad. And thus there is little reason to believe that insisting on accountability for these mistakes will fuel more war. Indeed, there is a case to be made that the opposite could be true—branding those whose actions lead to unnecessary death and destruction as criminals and illuminating the harms done to individuals, families, and communities could make clearer the true cost of war and, perhaps, dampen enthusiasm for continuing such wars. In the absence of any empirical certainty one way or the other, it seems obvious that the morally and legally appropriate course is to seek opportunities to reduce deaths of civilians and the destruction of civilian property.

³⁰⁹ SAMUEL MOYN, *HUMANE* 8 (2021) (emphasis added).

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Others might ask if there is a cost to being more cautious. There is an obvious cost to taking strikes that mistakenly kill innocent civilians, but might there also be a cost if those engaged in warfighting are hypercautious? The best evidence available suggests that there is no such tradeoff between protecting civilians and preserving national security. To the contrary: taking steps to reduce unnecessary civilian deaths is not only the morally right thing to do, it is also in the best interests of the military effort. Social science research demonstrates that civilians living where armed forces were less careful to protect civilians view the armed forces as less legitimate. This had significant consequences for the success of U.S. military efforts in Iraq.³¹⁰ Disregard for civilian casualties also contributed to the precipitous fall of the Afghan government after U.S. withdrawal.³¹¹ In short, preventing mistakes is good for the military mission, not in tension with it.

A. U.S. Legal Reform

Both forms of “mistakes”—individual and systemic—create legal risk for the U.S. military. Reckless conduct can, for the crimes of killing and causing great suffering or serious injury to body or health, constitute a grave breach of the Conventions, so some of these violations could even constitute grave breaches.³¹² That would trigger not only individual criminal responsibility but would obligate the United States and every other state party to the Geneva Conventions to investigate those potential violations and, if the evidence supports it, prosecute those responsible. Common Article 1 of the Conventions imposes an obligation on the United States and its partners to take the steps necessary to not only “respect” the Conventions but also to

³¹⁰ See Benjamin Krick, Jonathan Petkun & Mara Redlich Revkin, *Civilian Harm and Military Legitimacy in War*, DUKE L. SCH. PUB. L. & LEGAL THEORY SERIES (Nov. 27, 2023), <https://ssrn.com/abstract=4633249>.

³¹¹ Anand Gopal, *The Other Afghan Women*, NEW YORKER (Sept. 6, 2021), <https://www.newyorker.com/magazine/2021/09/13/the-other-afghan-women> (demonstrating that the endless killing of civilians in the countryside of Afghanistan turned women against U.S. forces and Afghan government forces they supported).

³¹² Int’l Comm. of the Red Cross, *Commentary of 2016*, *supra* note 34, art. 50, ¶ 2933.

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“ensure respect” of the Conventions. The “responsibility of a State is engaged if the actions of its agents or actions otherwise attributable to it constitute internationally wrongful acts, in violation of its international obligations. . . . The State is required to cease the unlawful conduct and to make reparation for the injury caused by its wrongful conduct.”³¹³

Common Article 1 obligations may also be triggered by systemic mistakes. Even when individual mistakes might not constitute reckless behavior, repeated mistakes might be, particularly if the patterns of mistakes are predictable and preventable—as are those identified above. The recklessness comes, then, *from the failure to design the system to avoid civilian deaths*. Behind individual “mistakes” is too often a failure to gather the information necessary to enable a better decision. That is often not a failure attributable to individual operators. It is a *systemic* failure. Such systemic failures remain unaddressed because no single person is clearly responsible. No one has responsibility for addressing the known shortcomings in the broader system and so they remain, and civilians continue to die unnecessarily as a result.

The United States should lead the way in identifying these sources of unnecessary civilian deaths and charting a way forward. It can show how states can responsibly manage both individual “mistakes” that meet the recklessness standard and the more challenging systemic mistakes that can be harder to detect but are likely the source of many unnecessary civilian deaths.

The good news is that the U.S. military has recently made efforts at reform. In January 2022, not long after the catastrophic Kabul strike that turned out to be a case of mistaken identity, Secretary Austin issued a memorandum calling for an action plan for civilian harm mitigation.³¹⁴ The plan grew in part out of a RAND Corporation study, which had found that the Department was not adequately organized or

³¹³ Int’l Comm. of the Red Cross, *State Responsibility*, HOW DOES LAW PROTECT IN WAR?, https://casebook.icrc.org/a_to_z/glossary/state-responsibility

³¹⁴ Jim Garamone, *Austin Directs DOD to Develop Action Plan on Civilian Harm Mitigation*, U.S. DEP’T OF DEF. (Jan. 27, 2022), <https://www.defense.gov/News/News-Stories/Article/Article/2914989/austin-directs-dod-to-develop-action-plan-on-civilian-harm-mitigation/>.

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resourced to reduce and respond to civilian harm incidents, as well as reporting in *The New York Times*.³¹⁵ A RAND researcher involved in the report acknowledged that improvements would require “institutional, not just operational, changes.”³¹⁶ The result was the “Civilian Harm Mitigation and Response Action Plan (CHMR-AP).”³¹⁷ That plan outlined a number of actions for DOD to carry out to strengthen its civilian harm mitigation program, including establishing the Civilian Protection Center of Excellence. In December 2023, Secretary Austin approved a new Department of Defense Instruction on Civilian Harm Mitigation and Response, a significant step toward implementing the objectives set out in the CHMR-AP.³¹⁸ But it is, as yet, unclear how effective these reforms will prove. This Part offers a number of recommendations designed to guide and support these efforts.

1. *Legal Responsibility for “Recklessness”*

At present, the U.S. government does not provide adequate guidance regarding legal liability for reckless acts in war. As noted in Part I, international courts and scholars agree that recklessness can meet the intent standard for several IHL violations, including willful killing. Yet U.S. government guidance does not reflect this understanding of intent. As a result, training, the drafting of Rules of Engagement (ROEs),

³¹⁵ Eric Schmitt, Charlie Savage & Azmat Khan, *Austin Orders Overhaul to Better Protect Civilians During U.S. Combat Operations*, N.Y. TIMES (Aug. 25, 2022), <https://www.nytimes.com/2022/08/25/us/politics/pentagon-civilian-casualties.html>.

³¹⁶ *Id.*

³¹⁷ U.S. Dep’t of Def., *Civilian Harm Mitigation and Response Action Plan (CHMR-AP)* (Aug. 25, 2022), <https://media.defense.gov/2022/Aug/25/2003064740/-1/-1/1/CIVILIAN-HARM-MITIGATION-AND-RESPONSE-ACTION-PLAN.PDF>.

³¹⁸ Off. of the Under Sec’y of Def. for Pol’y, *Department of Defense Instruction 3000.17 on Civilian Harm Mitigation and Response*, U.S. DEP’T OF DEF. (Dec. 21, 2023), <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/300017p.pdf>. For an explanation of the Instruction, see Dan E. Stigall, *The New U.S. Department of Defense Instruction on Civilian Harm Mitigation and Response*, ARTICLES OF WAR (Dec. 21, 2023), <https://lieber.westpoint.edu/new-us-department-defense-instruction-civilian-harm-mitigation-response/>.

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and decisions about investigations are made without adequate regard for the importance of holding individuals and teams to account when reckless acts lead to unjustified civilian deaths.

A key example of the inadequate guidance is the DoD Law of War Manual, which is used to guide the drafting ROEs and thus targeting decisions. The Manual has long been criticized for its provisions relating to protection of civilians.³¹⁹ There have been several updates to the Manual aimed at addressing these critiques. The latest, issued in July 2023, included revisions to a section on “Assessing Information in Conducting Attacks” and a new section on “Feasible Precautions to Verify Whether Objects of Attack are Military Objectives.”³²⁰

And yet the Manual, even as revised, does not address the issue of intent directly even once in its 1,206 pages. To the extent it addresses intent indirectly, it appears to assume the rules do not encompass recklessness. For instance, in its discussion of “Civilians—Conduct of Hostilities,” it emphasizes that “*expected* incidental harm to civilians may not be excessive in relation to the anticipated military advantage from an attack.”³²¹ And in its

³¹⁹ See, e.g., Oona Hathaway, Marty Lederman & Michael Schmitt, *Two Lingering Concerns About the Forthcoming Law of War Manual Amendments*, JUST SEC. (Nov. 30, 2016), <https://www.justsecurity.org/35025/lingering-concerns-forthcoming-law-war-manual-amendments/> (raising concerns about the Manual’s treatment of proportionality and the principle of distinction); Oona A. Hathaway, *The Law of War Manual’s Threat to the Principle of Proportionality*, JUST SEC. (June 23, 2016), <https://www.justsecurity.org/31631/lowm-threat-principle-proportionality/> (raising concerns about the Manual’s treatment of proportionality); Oona A. Hathaway, *The Law of War Manual Debate Goes to ASIL*, JUST SEC. (March 31, 2016), <https://www.justsecurity.org/30345/law-war-manual-debate-asil/> (noting that “[s]ome areas that have come under fire are its treatment of human shields, its treatment of the press, and the precautions to minimize civilian harm”); Adil Ahmad Haque, *Human Shields in the DOD Manual: A New Mistake or an Old One?*, JUST SEC. (Oct. 29, 2015), <https://www.justsecurity.org/27173/human-shields-dod-manual-mistake-one/>.

³²⁰ Caroline D. Krass, *Department of Defense Issues Update to DoD Law of War Manual on Presumption of Civilian Status and Feasible Precautions to Verify Military Objectives*, JUST SEC. (July 31, 2023), <https://www.justsecurity.org/87430/department-of-defense-issues-update-to-dod-law-of-war-manual-on-presumption-of-civilian-status-and-feasible-precautions-to-verify-military-objectives>.

³²¹ Dep’t of Def. Off. of Gen. Couns., *Department of Defense Law of War Manual* (rev. July 2023), § 4.8.2,

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discussion of “What Precautions are Feasible,” a section added in the July 2023 revision in response to critiques, it states that “[t]he standard for what precautions must be taken is one of due regard for civilian casualties, not an absolute requirement to do everything possible.”³²² In support, it cites a statement by Neville Chamberlain in 1938 emphasizing how difficult it is in practice to determine whether “the dropping of bombs which have killed civilians in the neighbourhood of military objectives is the result of want of care or not.” To illustrate, he explains, “Suppose a man makes a bad shot, which is not at all unlikely when machines are going at over 300 miles an hour and when . . . you have to release the bomb miles away from its objective—it seems to me that it is extremely difficult to lay down exactly the point at which reasonable care turns into unreasonable want of care.”³²³ The Manual never confronts the question of whether, knowing that the bomb is so inexact under those conditions, the shot should be taken at all, given the substantial risk that it will not hit its intended target. It does, however, acknowledge that a “wanton disregard for civilian casualties or harm to other protected persons and objects is clearly prohibited.”³²⁴ Yet it states that “mere poor military judgment (such as mistakes or accidents in conducting attacks that result in civilian casualties) is not by itself a violation of the obligation to take precautions.”³²⁵

The Manual, as currently written, offers mixed messages on the obligation not to engage in reckless acts that may constitute violations of the law of armed conflict. Perhaps understandably, it aims to make clear that feasible precautions are not the same as *all* possible precautions. But in the process it leaves troops on the ground with inadequate guidance regarding their obligations when they know that they possess inadequate information to take a strike in confidence that there

<https://media.defense.gov/2023/Jul/31/2003271432/-1/-1/0/DOD-LAW-OF-WAR-MANUAL-JUNE-2015-UPDATED-JULY%202023.PDF> (emphasis added).

³²² *Id.*, § 5.2.3.2.

³²³ *Id.* § 5.2.3.2 n.46 (quoting Neville Chamberlain, Prime Minister, United Kingdom, *Statement before the House of Commons*, Jun. 21, 1938, HANSARD, 337 HOUSE OF COMMONS DEBATES §§ 937-939).

³²⁴ *Id.* § 5.2.3.2.

³²⁵ *Id.* § 5.2.3.3.

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will be no or minimal unexpected civilian deaths. Moreover, the Manual, like the law of armed conflict on which it is based,³²⁶ focuses too much on individual strikes and offers no guidance about the responsibility of commanders to ensure that systems provide those they command with the information they need to avoid unnecessary civilian casualties and to learn from their mistakes.

2. *Systemic Reforms*

a. Reform Targeting Practices

There are a range of systemic reforms that the United States could put in place that would make a significant difference to the incidence of civilian casualties.

Target misidentification, for example, is often the result of inadequate information, willingness to target based on perceived patterns of behavior, and confirmation bias. These known failures could be countered by (a) requiring more eyes on the target before providing approval for a strike, except in situations of immediate danger, (b) limiting the use of signature strikes, and (c) including a system for red teaming proposed targets to surface contrary information.

Failure to detect the presence of civilians, mis-judging secondary explosions, and failing to detect civilians that later entered the target area all result from inadequate information about the situation surrounding a proposed target. In the case of secondary explosions, allowing targeteers to rework the target to produce unrealistically low expected casualties could be remedied by holding targeteers responsible for consistent failure to accurately predict civilian casualties. In each of these cases, the failure to provide targeteers with information that could have allowed them to better predict the true civilian casualty rate produces higher civilian deaths than necessary. But targeteers are not without blame, particularly if they rework targets to produce unrealistic civilian casualty estimates. If they knew that they would be held accountable after the fact for a pattern of inaccurate civilian casualty estimates, then civilian casualty rates would undoubtedly decline.

³²⁶ See *infra* section IV.C.

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The failure of pre-strike proportionality assessments derives from similar problems: The targeteer may rely on collateral scans to determine civilians are not in the area, but miss the fact that civilians are present but sheltering inside or under objects that obscure their presence. Misidentification of high-value targets can also produce incorrect proportionality analyses—because the (wrong) belief that a high-value target is present can lead to an assessment that more civilian casualties are proportional to the military advantage expected to be gained by the strike.

Some of these decisions are the inevitable result of the “fog of war.” There are situations in which information will necessarily be imperfect. This is particularly true in situations of active combat, or where U.S. troops are on the ground and potentially at risk. But many of the civilian casualty reports reviewed for this Article did not involve such high-pressure situations. Targeteers made decisions to take strikes based on incomplete and imperfect information. The decision to make decisions to deploy lethal force under those situations is a choice. In some cases, where information is manifestly inadequate and the targeteer must have known it was inadequate, that decision might even be considered reckless—and, hence, a “wilful” killing in violation of the law of armed conflict.³²⁷

In addition to providing those involved in making targeting decisions with better information and requiring them to later justify their decisions to take strikes that result in civilian casualties, more can be done to train those involved in targeting decisions about their legal obligations. The training curriculum for targeteers, Joint Terminal Attack Controllers, and those in equivalent positions should be carefully reviewed to ensure that they understand their obligations under the law of armed conflict. Those responsible for lethal decisions should understand their legal responsibilities so that they can interpret the ROEs and, as appropriate, push back against commanders who, for example, fail to reassess in light of credible new information.³²⁸

³²⁷ *See supra* Part I.

³²⁸ *See* Subsection III.B.3.

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b. Reform Post-Strike Practices

As noted in Part III, the military relies almost entirely on video footage in its after-action assessments. That video is often too brief or otherwise inadequate. There are a number of improvements that could be made to allow more accurate assessments: There could be a requirement that video be continued for a set period—perhaps a minimum of thirty minutes—after a strike. The military could also take steps to gather information on the ground, either directly or indirectly.³²⁹ We recognize that the U.S. military may resist recommendations that military investigators go to the sites of strikes when conducting battle damage assessments. Doing so could be resource-intensive, requiring ground combat and air assets to support the investigator. There would also be concerns that sending uniformed investigators to strike sites to assess civilian casualties could put them at risk of ambush or expose them to improvised explosive devices. Those concerns, however, can be overstated. If unguarded reporters and NGOs can gather this information, there is a reasonable case to be made that the best-resourced military in the world can do so as well.

There are other ways in which the U.S. military could augment video footage besides direct ground investigation. In addition to considering information provided by reputable reporters and non-governmental organizations, the military could conduct social media analysis and other open-source intelligence to supplement the overhead video. In addition, vetted HUMINT (human intelligence) sources could be tasked to investigate strike sites where doing so would not put them at unreasonable risk.

Steps could also be taken to discipline servicemembers and relieve commanders of command if they fail to keep adequate records of lethal strikes, as described in subsection III.B.2. This information is essential to assessing the legality of individual strikes. Too often, we found evidence that civilian

³²⁹ For related recommendations, see Protection of Civilian Objects including Critical Infrastructure in U.S. Military Operations: NGO Recommendations for DoD Policy on Civilian Harm, <https://civiliansinconflict.org/wp-content/uploads/2020/03/1-Final-2020-02-03-NGO-recommendations-on-Civilian-Objects-for-DoD-Policy-Nov-2019-1.pdf>.

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casualty reports could not be investigated because video had been destroyed and records were incomplete. These administrative failures may seem modest, yet correcting them is the first step toward solving the problem of civilian casualties. This is, moreover, a reform that the military is well-designed to implement. While the military may be reluctant to discipline servicemembers for bad strikes in situations of inadequate information out of fear that doing so could lead to failure to act in situations where it is necessary, administrative failures such as failure to maintain strike logs would not raise similar concerns. Strengthening recordkeeping would make it easier to hold service members accountable for truly reckless actions, make it possible to identify and remedy systemic failure. Moreover, individual service members may be more prudent if they know every strike will be logged.

The military should also review and update policies to ensure that adequate assets are available to support thorough post-strike analysis. Re-tasking of assets away from this task should be restricted to true *in extremis* situations—for example, where the asset is essential to support troops in contact with the enemy. Moreover, there is a good case for stronger transparency regarding investigations into strikes.³³⁰ It should not take several years of litigation to obtain unclassified information about strikes that have led to civilian deaths. Providing better public accounting where there have been civilian casualties could help build some trust between the population and the U.S. military. And it would allow independent investigators to more effectively supplement government resources.

Greater steps should be taken to ensure that investigations of civilian casualties are not carried out by the very units potentially responsible for those civilian casualties. There are a number of ways in which this could be done. One option would be to create an independent cell whose sole responsibility is to investigate civilian casualty reports in theater. As noted earlier, civilian casualty reports and battle

³³⁰ For an extended argument for transparency reforms, see Human Rights Clinic, *Out of the Shadows: Recommendations to Advance Transparency in the Use of Lethal Force* (2017), https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1024&context=human_rights_institute.

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damage assessments are typically assigned to the unit that carried out the strike. Often the intelligence unit assigned to investigate civilian casualties has other intelligence demands that take priority. This leads to inadequate investigations. Moreover, because investigations take place within an individual unit, broader patterns are harder to spot. A unit dedicated to assessing civilian casualties would be able to better identify broader trends that might otherwise not be obvious.

c. Why Reform by the United States Matters

Reform to U.S. practices matters for a number of reasons. First, and perhaps most obvious, it matters for the civilians unnecessarily killed in U.S. counter-terrorism operations. The United States has recently been actively engaged in using air and drone strikes in at least six countries—Libya, Somalia, Syria, Pakistan, Iraq, Yemen, and Afghanistan.³³¹ As the documents we relied on in preparing this Article demonstrate, civilian deaths are the result of repeated errors. If those obvious systemic failures are addressed, fewer people will die as a direct result of U.S. military operations. Taking these steps is a legal imperative, as well as a moral one. It is also likely to make these counter-terrorism operations more effective. The more innocent civilians killed by the U.S. military, the more likely the local population is to reject U.S. and allied government’s claims to be

³³¹ Stephanie Savell, *United States Counterterrorism Operations Under the Biden Administration, 2021-2023* (Nov. 2023), https://watson.brown.edu/costsofwar/files/cow/imce/papers/2023/US-CounterterrorismOperations_2021-2023.pdf. In addition to the five countries reflected in the previous cite, the U.S. has also recently engaged in air strikes in Yemen. Phil Stewart, Idrees Ali & Mohammed Ghobari, *U.S. and Britain Strike Yemen in Reprisal for Houthi Attacks on Shipping*, REUTERS (Jan. 12, 2024), <https://www.reuters.com/world/us-britain-carry-out-strikes-against-houthis-yemen-officials-2024-01-11/>. The number was even higher in the not-distant past. Stephanie Savell, *This Map Shows Where in the World the U.S. Military is Combatting Terrorism*, SMITHSONIAN MAG. (Jan. 2019), <https://www.smithsonianmag.com/history/map-shows-places-world-where-us-military-operates-180970997/>; see also Tess Bridgeman & Brianna Rosen, *Introduction to Symposium: Still at War — Where and Why the United States is Fighting the ‘War on Terror,’* JUST SEC. (Mar. 24, 2022), <https://www.justsecurity.org/80800/introduction-to-symposium-still-at-war-where-and-why-the-united-states-is-fighting-the-war-on-terror/> (noting a U.S. combat role in eight countries).

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working in the best interests of the local population and the more likely they are to be receptive to the messaging of the very same terrorist groups the U.S. aims to counter.³³²

Second, what the United States does sets the standard for the world. The United States is involved in joint operations and training missions around the globe. Indeed, the United States has recently engaged in counterterrorism training programs in over sixty countries.³³³ Our partners in these countries are learning from us; if our procedures are inadequate, then their procedures will be as well. The policies and practices of the United States inevitably become the policies and practices of the world.

Third, the United States’ actions influence other states indirectly, shaping customary international law and setting expectations for the actions of other states around the globe, whether or not we partner with them. As of 2020, it has been reported that at least 102 countries have acquired an active military drone inventory, and around 40 of those possess or are in the process of acquiring armed drones.³³⁴ In addition, at least twenty non-state groups have obtained armed and unarmed drone systems.³³⁵ The United States, by setting an example for how to apply the law of armed conflict to wars fought using remotely piloted aircraft, can shape the law for decades to come.

B. Law of Armed Conflict Reform

The problems identified in this Article are not limited to the United States; they are experienced by militaries around the world. That is due in part to shortcomings in the law of armed conflict, which is not well designed to address mistakes in war, especially those that arise from systemic errors.

Even command responsibility does not address the problem. Yes, command responsibility places responsibility on commanders to ensure that the team complies with the law of

³³² See *supra* text accompanying notes 310-311.

³³³ Savell, *supra* note 325.

³³⁴ Simon Bagshaw, *Civilian Casualties in U.S. Air Wars: A Wake-up Call for Canada and its Future Use of Armed Drones?*, JUST SEC. (Jan. 4, 2022), <https://www.justsecurity.org/79633/civilian-casualties-in-u-s-air-wars-a-wake-up-call-for-canada-and-its-future-use-of-armed-drones/>.

³³⁵ *Id.*

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armed conflict. But command responsibility is generally understood to generate responsibility in the commander to take precautions to ensure that the individuals under their command comply with the law of armed conflict.³³⁶ It is not generally understood as an obligation to ensure that the *system* is designed to minimize civilian casualties.

The reforms outlined in the prior sections would go a significant distance to addressing the systems failures that we have identified in our investigation. But they would not solve the global problem that lies at its source—that is, the failure of the law of armed conflict to create adequate incentives to identify and act to fix systemic failures that lead to civilian deaths. Here we make several specific recommendations for reform.

1. Legal Responsibility for “Recklessness”

The ICRC has long maintained that acting “wilfully” includes recklessness.³³⁷ Yet it has muddied the waters by also maintaining that “[t]he Geneva Conventions are silent as to the requisite degree of *mens rea* attached to most grave breaches . . . leav[ing] it to State Parties to determine the requisite mental element attached to them.”³³⁸ Given the rising importance of mistakes in war—many of which are the result of reckless

³³⁶ See, e.g., U.S. Dep’t of the Army, *FM 27-10: The Law of Land Warfare* (1956, Change No. 1 1976), ¶ 501, <https://irp.fas.org/doddir/army/fm27-10.pdf> (“In some cases, military commanders may be responsible for war crimes committed by subordinate members of the armed forces, or other persons subject to their control. Thus, for instance, when troops commit massacres and atrocities against the civilian population of occupied territory or against prisoners of war, the responsibility may rest not only with the actual perpetrators but also with the commander.”); Additional Protocol I, *supra* note 19, art. 86(2) (“The fact that a breach of the Conventions or of this Protocol was committed by a subordinate does not absolve his superiors from penal or disciplinary responsibility, as the case may be, if they knew, or had information which should have enabled them to conclude in the circumstances at the time, that he was committing or was going to commit such a breach and if they did not take all feasible measures within their power to prevent or repress the breach.”).

³³⁷ See *supra* Section I.B.

³³⁸ Int’l Comm. of the Red Cross, *Commentary of 2016*, *supra* note 34, art. 50, ¶ 2932.

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behavior—the ICRC should clarify that reckless conduct is culpable and triggers both individual and State responsibility. For the individual, reckless conduct can constitute a war crime, and for the State, reckless conduct can trigger a responsibility to investigate and prosecute that unlawful behavior.

The entire ICRC Customary International Humanitarian Law database, moreover, has no discussion of intent.³³⁹ It is perhaps no surprise, then, that states largely ignore the question in their own military manuals. In this respect, the United States is far from alone.³⁴⁰ This silence is partially responsible for states’ failure to take appropriate action when reckless actions violate the law of armed conflict. The failure to clarify that reckless actions can amount to war crimes also likely affects the training that forces receive.

The ICRC and other bodies that help interpret, advocate, and disseminate international humanitarian law should place a greater emphasis on making clear that simply calling an action a “mistake” does not relieve the individuals or states involved of their responsibility under IHL. If a mistake resulted from reckless action, it triggers legal responsibilities just as would be true if there were direct intent. Greater clarity about this, and advocacy to states to include a discussion of intent in their law of war manuals, could go some distance to encouraging states to take greater responsibility for preventing reckless actions that cost innocent lives.

2. *Systemic Reforms*

a. The Duty to Address Systemic Mistakes in Order to “Ensure Respect”

Our investigation makes clear a fundamental problem in applying law to the conduct of war: The law as currently constructed is largely focused on the conduct of individuals, not the systems within which they operate. This is not just true when it comes to war crimes investigations. Even Common

³³⁹ *International Humanitarian Law Databases*, INT’L COMM. OF THE RED CROSS, <https://ihl-databases.icrc.org/en/customary-ihl>.

³⁴⁰ *International Humanitarian Law Databases: Military Manuals*, INT’L COMM. OF THE RED CROSS, <https://ihl-databases.icrc.org/en/customary-ihl/src/iimima>.

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Article 1 obligations and the law of state responsibility turn on whether there has been a violation of the law of armed conflict, and that law in turn focuses on individual events, not the systems within which the individual events take place. Hence, expanding individual criminal liability for perpetrators, even if they can be identified, is likely not the best or most effective means to reduce mistakes based on weak or faulty *systems*.

There are, of course, exceptions—cases where the law of armed conflict does address systems—and they are important ones. For example, states must issue instruction in international humanitarian law to their armed forces.³⁴¹ Each state, moreover, must make legal advisers available to advise military commanders on the application of IHL.³⁴² There is, too, an obligation to investigate allegations of violations of IHL and to prosecute grave breaches.³⁴³ These are systemic obligations meant to create a culture of compliance. But what is missing from these rules as traditionally understood is any obligation on states to actively seek to learn from their mistakes.

It is clear that, as a result, a key aim of the Geneva Conventions—to prevent unnecessary civilian death—is not being met. In many cases, the systems within which targeting decisions are being made are set up in such a way that “mistakes” are inevitable. Moreover, in many cases, those involved can tell themselves that they are not at fault: It was the faulty video. It was the failure to take into account the likely effects of secondary explosions. A civilian entered the frame at the last minute (and the visibility of the area was narrowly focused). The information on which the identification was made

³⁴¹ See, e.g., Geneva Convention I, *supra* note 33, art. 47; Geneva Convention II, *supra* note 110, art. 48; Geneva Convention III, *supra* note 110, art. 127; Geneva Convention IV, *supra* note 107, art. 144; Additional Protocol I, *supra* note 19, art. 83 (adopted by consensus); Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), art. 19 (adopted by consensus), June 8, 1977, 1125 U.N.T.S. 609.

³⁴² Int’l Comm. of the Red Cross, *Rule 141: Legal Advisers for Armed Forces*, <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule141>.

³⁴³ Geneva Convention I, *supra* note 33, art. 49; Geneva Convention II, *supra* note 110, art. 50; Geneva Convention III, *supra* note 110, art. 129; Geneva Convention IV, *supra* note 107, art. 146; see also Int’l Comm. of the Red Cross, *Rule 158: Prosecution of War Crimes*, <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule158>.

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turned out to be wrong, and that was someone else’s fault. After the fact, too little is done to try to identify—and correct—systemic errors.

As documented in Part III, investigations often rely on inadequate information, ignore credible open-source information, rely on units to investigate themselves, and can’t track reports because of inadequate understanding of the area. Most of all, the structural features of the civilian casualty assessments treat unexpected civilian casualties as one-off events. They fail to look for patterns of failures or produce the information that would be needed to identify such patterns. While no one may mean to kill civilian men, women and children in any given strike, the systems have been constructed in a way that makes such deaths predictable, indeed inevitable. And the system is set up so that no one learns from those mistakes.

A more effective approach might be to revisit the obligation on states in Common Article 1 to “ensure respect” of the Geneva Conventions. Updated Commentary issued by the ICRC in 2016 made clear that the obligation to “ensure respect” encompassed obligations on states to take steps to ensure compliance not only by their own forces but by forces they support (whether state or non-state actors). While that interpretation has met with significant resistance, perhaps most notably by the United States, it has nonetheless had an impact. It has made clear that states’ obligation to prevent violations of the Geneva Conventions can encompass obligations to take positive steps, such as training partner forces and withdrawing support in cases of ongoing violations, that play an important role in achieving the central aims of IHL of reducing the tragedy of war.³⁴⁴

Indeed, elements of the 2016 Commentary may be read to encompass an obligation to address repeated “mistakes.” The Commentary states that the duty to “ensure respect” “sets a clear standard, as ‘ensuring’ means ‘to make certain that something will occur or be so’ or inversely ‘make sure that (a

³⁴⁴ Oona A. Hathaway, et al, *Ensuring Responsibility: Common Article 1 and State Responsibility for Non-State Actors*, 95 TEXAS L. REV. 539 (2017).

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problem) does not occur.”³⁴⁵ It continues, “States are thus required to take appropriate measures to prevent violations from happening in the first place. Accordingly, the High Contracting Parties must – starting in peacetime – take all measures necessary to ensure respect for the Conventions. Respecting the Conventions in case of an armed conflict regularly presupposes that preparations have been made in advance.”³⁴⁶

Once we recognize that systemic failures lead to systemic errors, it becomes clear that the obligation to “ensure respect” can be read to encompass an obligation to identify, learn from, and address these errors. Doing so could make a real difference for civilians caught up in the horrors of war.

b. Rethinking Proportionality

There is a case, too, for rethinking and updating the way in which proportionality is assessed in light of changes in technology and data analytic capacities. At present, proportionality is assessed strike-by-strike. If civilians are killed in a strike, the question asked during an investigation is whether the strike was “expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.”³⁴⁷ If the answer is no, then the strike is often considered legal, even if far more civilians died than expected. As noted above, if the decision to strike was recklessness, then it may be possible to establish culpability. But for strike that fall short of recklessness, there is no legal accountability.

This approach to proportionality creates the wrong incentives. First, it creates limited incentives to accurately predict the real costs of a strike. The al Jadida strike described above illustrates this problem: The U.S. military was unaware of either the presence of a weapons cache or the presence of civilians; as a result, 101 civilians died.³⁴⁸ Had the military been

³⁴⁵ Int’l Comm. of the Red Cross, *Commentary of 2016*, *supra* note 34, art. 1, ¶ 145.

³⁴⁶ *Id.*

³⁴⁷ Additional Protocol I, *supra* note 19, art. 51.

³⁴⁸ See *supra* text accompanying notes 207–209.

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aware of how many civilians were at risk from the strike, which was targeted at two snipers, it would not have been judged proportionate and thus would not have been approved. Because the military found that those who approved the strike were unaware of the presence of civilians, the strike was considered “proportional” even though far more civilians were killed than expected. Second, the current approach to proportionality creates little incentive to learn from mistakes and puts no burden on states to take steps to avoid errors in the future. The slate is wiped clean after every strike.

To address this problem, states should consider updating the concept of proportionality to include an obligation to assess proportionality in light of prior performance. One way to do this would be to require states to keep a record of their *ex ante* proportionality analysis—the expected harm to civilians and civilian objects and expected military advantage of a given strike—as well as the actual harm to civilians and civilian objects and actual military advantage achieved from that same strike. Periodically, states could be required to examine the gap between the two. States could assess the ratio of the *expected* proportion to the *actual* proportion. That ratio then could then be applied as a discounting factor to the proportionality analysis going forward. Under this approach, states that over-estimated civilian harm in the initial period would have a greater degree of freedom in the next period; those that under-estimated civilian harm, on the other hand, would have a lesser degree of freedom. This process would incentivize militaries to more carefully assess proportionality and would incentivize them to learn, as getting the estimate right (as assessed by *ex post* comparisons between expected and to actual effect) would buy them greater freedom in the future. (States, of course, could adopt this approach on their own, as well.)

Admittedly, there are a number of practical challenges to implementing such a proposal, not the least of which is gaining accurate and reliable information about the actual impact of a given military strike after the fact. Moreover, proportionality analysis is not generally conceived of as a strictly quantitative analysis.³⁴⁹ Nonetheless this thought experiment highlights the

³⁴⁹ The U.S. DoD Law of War Manual, for example, maintains that “[d]etermining whether the expected incidental harm is excessive does not

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current failure of existing law to place any penalty on states that get their proportionality analyses wrong on a regular basis. By allowing states to start their proportionality analyses afresh with every single strike, no matter how bad the past record, current law creates the wrong incentives. It is, perhaps, no surprise, then, that states so often get those analyses wrong. Tracking the relationship between expected proportionality and actual proportionality would also allow armed forces to identify particular units that have especially good or bad records. That, in turn, would make it easier to correct those that perform especially poorly and reward those that perform especially well—and to learn not just from what has gone wrong but from what has gone right, too.

If the recommendations made earlier in this piece are adopted, then more information will be gathered that will provide a basis for analyzing after the fact the information available to those making targeting decisions, the inferences they drew from that information, the decisions they made in light of that information, and how that information matched or failed to match the post-strike assessments. It will not be long before AI tools can be used to analyze not only video taken of the area and the incident but also social media posts and information gathered through clandestine channels to more accurately assess the gap between expectations and reality. Even now, though, the information available to advanced militaries is sufficient to allow them to more fully assess the accuracy of ex ante proportionality analysis as judged against information gathered after the strike.

necessarily lend itself to quantitative analysis because the comparison is often between unlike quantities and values.” *Department of Defense Law of War Manual*, *supra* note 319, § 5.12.3 (citing *Final Report to the Prosecutor*, *supra* note 57, ¶ 48). However, the U.S. military has developed, maintained, and distributed collateral damage estimation (CDE) reference tables to provide quantitative data on which a decision to strike a target or not strike a target could be based. See *Chairman of the Joint Chiefs of Staff Instruction, CJCSI 3160.01* (Feb. 13, 2009), <https://www.justsecurity.org/wp-content/uploads/2017/04/Collateral-Damage-Estimation-Methodology-CJCSI.pdf>. Hence a system for quantifying the proportionality analysis is not unimaginable.

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CONCLUSION

This Article has shown that “mistakes” in war are not uncommon or unpredictable. They are, instead, common and predictable—and the loss of innocent human life that results should not be written off as an unavoidable tragedy. “Mistakes” are often the result of systemic errors that can be identified and addressed.

With the increasing use of remotely operated military weapons, the problems identified in this Article are only likely to grow. More states are gaining the capacity to conduct warfare from afar. Meanwhile, warfare is more often taking place in densely populated cities, placing civilians at risk. Soon, the rising use of autonomous weapons systems and artificial intelligence will mean that decisions will more often rely on systems design. Understanding the role of systemic design choices will be critical to ensuring that the law of armed conflict is able to achieve its aim of minimizing the most brutal effects of war on civilians in the decades to come.