Humanitarian Access, Great Power Conflict, and Large-Scale Combat Operations

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About CHRHS

Established in 2019 at Brown University's Watson Institute for International and Public Affairs, the Center for Human Rights and Humanitarian Studies (CHRHS) is committed to tackling the human rights and humanitarian challenges of the 21st century. Our mission is to promote a more just, peaceful, and secure world by furthering a deeper understanding of global human rights and humanitarian challenges, and encouraging collaboration between local communities, academics, and practitioners to develop innovative solutions to these challenges.

About the Authors

The authors prepared this report in their capacities as researchers for CHRHS, Brittany Card as a Visiting Scholar at CHRHS, Rob Grace as an Affiliated Fellow at CHRHS, and Tarana Sable as a Research Assistant at CHRHS.

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Executive Summary

The geopolitical landscape of the world is shifting. Geopolitical dynamics are driving the re-emergence of great power competition as the dominant paradigm through which major global powers view their relationships with each other. For instance, the United States shifted its focus from the 'Global War on Terror' framework that dominated foreign policy planning for most of the 21st century to a focus on great power competition. Within this new frame, China and Russia are identified as its greatest threats. Meanwhile, China and Russia are pursuing global influence as they view the US as a struggling hegemon. All three states appear braced for long-term geopolitical contestation and are engaged in preparations for future potential conflict, including in the form of large-scale combat operations.

For humanitarian policymakers and practitioners, the state of thinking, analysis, and planning on these issues, for the most part, remains nascent. The overall conclusion of this report is that it cannot remain nascent for much longer. Conflict between two or more states, especially in the form of large-scale combat operations, should it occur, will lead to devastating impacts on civilian populations and significant challenges for humanitarian response.

The international humanitarian system as it exists today has never engaged in a response context of this nature. Current ongoing complex emergencies that entail overlapping conflicts between an array of non-state and state actors—such as those in Ukraine, Syria, Yemen, and Iraq—and past great power military conflicts, such as World War I and World War II, offer some insight into the scale and scope of humanitarian needs, as well as the response challenges, likely to arise during large-scale military conflict between great powers. However, the anticipated high-tempo and destructive nature of operations, scope of affected areas, and sheer number of forces involved in operations across multiple domains—with a particular emphasis on the role of information and cyber operations—is likely to have effects on civilian populations and militaries far beyond what one can fully comprehend from current events.

To advance understanding of the humanitarian dimensions of large-scale combat operations between great powers, or between other peer or near-peer states, this report analyzes humanitarian access challenges likely to arise in such contexts. The analysis is based on focus group sessions and key informant interviews with 37 humanitarian, military, academic, and government stakeholders. This report examines these issues in five parts. Part I defines key terms and offers an overview of the methodology of this research project. Part II provides a more in-depth examination of the current geopolitical environment. Part III discusses the likely overall characteristics of future great power conflict and large-scale combat operations. Part IV examines three categories of anticipated humanitarian access challenges: political, operational, and tactical. Part V articulates recommendations for humanitarian organizations, governments, and militaries to proactively adopt to mitigate and prepare for the humanitarian access challenges identified in this research.

Humanitarian Access Challenges During Large-Scale Combat Operations

Political Challenges

relating to high-level
political or strategic
engagements, often involving
issues relating to the norms
or values that undergird
humanitarian action

Limited impact of highlevel multilateral political engagements

Politicized government perceptions of the international humanitarian actors

Relationship deficits with potential state actors

Operational Challenges

relating to developing and planning practical and procedural methods for activities or operations that align with broader political and strategic goals

Bureaucratic impediments and donor restrictions

Limited operational role of traditional international humanitarian actors

Devising processes to manage humanitarian insecurity

Tactical Challenges

relating to implementing operational arrangements while also responding to ground-level issues, which can change rapidly

Managing access and logistics across multiple domains with limited resources

Physical and digital threats to aid worker security

Recommendations for Humanitarian Organizations, Governments, and Militaries

Develop awareness in the humanitarian community about possible future scenarios, including humanitarian implications and response requirements

Incorporate humanitarian and protection of civilian considerations into military planning

Build relationships with potential future parties to the conflict

Conduct planning to ensure the continuity of humanitarian operations

Improve humanitarian-military relations through education and training

Introduction

"We are in great power competition today, and with competition, conflict is always a risk—this is not just a problem for tomorrow's leaders."

- Lt. Gen. Michael D. Lundy, US Army, October 2018¹

The geopolitical landscape of the world is shifting. The Interim National Security Strategic Guidance, issued by United States (US) President Joe Biden in March 2021, warns against "strategic challenges from an increasingly assertive China and destabilizing Russia." The publication dubs China "the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system," whereas "Russia remains determined to enhance its global influence and play a disruptive role on the world stage." This vision of the security threats that the US faces from abroad is very different from the 'Global War on Terror' framework that dominated US foreign policy planning for most of the 21st century.

Meanwhile, the Chinese government has embraced the paradigm of a 'New Type of Great Power Relationship' to frame Sino-American relations and has undertaken a series of military modernization initiatives, aiming to develop a 'world-class' military by 2049 that is equal or superior to the US.⁴ Over the past decade, Russia's relationship with Western states has deteriorated, in part due to the conflicts in Syria and Ukraine.⁵ Whereas the US sees China and Russia as rising threats, China and Russia see the US as a struggling hegemon prone toward aggression to preserve its waning global influence.⁶ All three states appear braced for long-term geopolitical contestation, with substantial military strategizing for future possible great power conflict scenarios already underway.

¹ Lt. Gen. Michael D. Lundy, U.S. Army, "Meeting the Challenge of Large-Scale Combat Operations Today and Tomorrow," Military Review, September-October 2018, p. 112, https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/SO-18/Lundy-LSCO.pdf.

² Office of the President, Interim National Security Strategic Guidance: The White House, March 2021, p. 14.

³ Ibid., p. 8.

⁴ Michael S. Chase, "China's Search for a 'New Type of Great Power Relationship," China Brief Vol. 12, Issue 17 (2012), https://jamestown.org/program/chinas-search-for-a-new-type-of-great-power-relationship/; Department of Defense, Annual Report to Congress: Military and Security Developments Involving the People's Republic of China (Washington, D.C.: Department of Defense, 2020), p. i, https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/1/2020-DOD-CHINA-MILITARY-POWER-REPORT-FINAL.PDF. For an analysis of the limitations of Chinese strategic foresight, see Paul Charon, "Strategic Foresight in China: The Other Dimension Missing," European Union Institute for Security Studies, 2021, https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief_5_2021.pdf.

⁵ Dmitri Trenin, "Strategic, Mental Shift in Global Order," Global Times, Carnegie Moscow Center, May 17, 2015, https://carnegiemoscow.org/2015/05/17/ukraine-crisis-causes-strategic-mental-shift-in-global-order-pub-60122.

⁶ See "Wang Yi Meets with Russian Foreign Minister Sergey Lavroy," Consulate General of the People's Republic of China in New York, March 26, 2021, https://www.fmprc.gov.cn/ce/cgny/eng/xw/t1864347.htm, which is a joint statement from China and Russia in which both countries call on the United States to "reflect on the damage it has done to global peace and development in recent years, halt unilateral bullying, stop meddling in other countries' domestic affairs, and stop forming small circles to seek bloc confrontation."

For humanitarian policymakers and practitioners, the state of thinking, analysis, and planning on these issues, for the most part, remains nascent. The overall conclusion of this report is that it cannot remain nascent for much longer. Conflict between two or more states, especially in the form of large-scale combat operations, should it occur, will lead to devastating impacts on civilian populations and pose significant challenges for humanitarian response.⁷ Furthermore, large-scale combat operations will likely involve all five of the warfighting domains: air, land, sea, space, and cyber.

The international humanitarian system as it exists today has never engaged in a response context of this nature. Current ongoing complex emergencies that entail overlapping conflicts between an array of non-state and state actors—such as those in Ukraine, Syria, Yemen, and Iraq—and past great power military conflicts, such as World War I and World War II, offer some insight into the scale and scope of humanitarian needs, as well as the response challenges, likely to arise during large-scale military conflict between great powers. However, the high tempo of operations, employment of conventional and advanced weapons, sheer number of military forces involved, and scope of affected areas in future large-scale combat operations is likely to have effects on civilian populations and militaries far beyond what one can fully comprehend from current events.

To advance understanding of the humanitarian dimensions of large-scale combat operations between great powers, or between other peer or near-peer states, this report analyzes humanitarian access challenges likely to arise in such contexts. Across the globe, and especially in the context of large-scale humanitarian crises, populations already struggle to access essential services. Humanitarian organizations face a myriad of access constraints, including issues related to entering a country (obtaining visas, importing equipment, goods, and supplies); bureaucratic obstacles to operating within a country (obtaining permission from authorities to implement programs or travel to certain areas); diversion of aid (including efforts to control humanitarian programming in ways that serve security or political interests of states, non-state armed groups, or other actors); security incidents (attacks against aid workers, goods, and equipment, as well as ongoing military operations); and infrastructure constraints or weather-related hazards. In armed conflicts, additional challenges include building simultaneous relationships with host states and non-state armed groups; navigating decisions on the use of armed escorts; implementing humanitarian notification systems; and grappling with counter-terrorism laws and policies that can complicate engagements with non-state armed groups designated as terrorists.

Adequate preparation for possible future great power conflict scenarios must entail understanding how these challenges are likely to manifest, in what ways the dynamics of large-scale combat operations might further aggravate these challenges, what new challenges might arise, and what steps humanitarian and military actors can take to better navigate these difficulties. This report examines these issues in five parts. Part I defines key

⁷ Daniel R. Mahanty and Annie Shiel, "Protecting Civilians Still Matters in Great-Power Conflict," Defense One, May 3, 2019, https://www.defenseone.com/ideas/2019/05/protecting-civilians-still-matters-great-power-conflict/156723/; and Daniel R. Mahanty, "Even a Short War Over Taiwan or the Baltics Would Be Devastating," Foreign Policy, July 29, 2021, https://foreignpolicy.com/2021/07/29/war-taiwan-china-united-states-russia-baltics-nato-military-civilians-deaths-losses-casualties/.

⁸ See "OCHA on Message: Humanitarian Access," United Nations Office for the Coordination of Humanitarian Affairs, April 2010, https://www.unocha.org/sites/unocha/files/dms/Documents/OOM_HumAccess_English.pdf.

⁹ Rob Grace, "Surmounting Contemporary Challenges to Humanitarian-Military Relations," Center for Human Rights and Humanitarian Studies, Watson Institute for International and Public Affairs, Brown University, August 2020, p. 32-41, https://watson.brown.edu/chrhs/files/chrhs/imce/research/Surmounting%20Contemporary%20Challenges%20to%20Humanitarian-Military%20Relations_Grace.pdf.

terms and offers an overview of the methodology of this research project. Part II provides a more in-depth examination of the current geopolitical environment, including current military thinking and planning for large-scale combat operations. Part III discusses the likely overall characteristics of future great power conflict and large-scale combat operations. Part IV examines anticipated humanitarian access challenges during large-scale combat operations. Part V provides concluding remarks and recommendations.

Part I Definitions and Methodology

A. Defining Key Terms

Great power conflict refers to militarized incidents that involve great powers in the international system. By "great powers," this report means, "states whose interests and capabilities extend beyond their immediate neighbors. More so than other states, they shape and respond to the structure of the international system." Conflict can entail three dimensions. The first is threats of the use of force, meaning "verbal indications of hostile intent." The second is displays of force, which "involve military demonstrations but no combat interaction." Displays of force may include public displays of naval or aerial force, an increase in military readiness, and force mobilization. The third dimension is the use of force, which encompasses a wide range of conflict types, including large-scale combat operations, proxy warfare, and the use of military force in settings that fall short of the legal definition of armed conflict. 14

<u>Peer-to-peer or near-peer conflict</u> entails two or more states of relatively equal capabilities and political will engaging in military confrontation with each other. A US-Army funded RAND report presents the following definition of a peer competitor: "For a state to be a peer, it must have more than a strong military. Its power must be multidimensional—economic, technological, intellectual, etc.—and it must be capable of harnessing these capabilities to achieve a policy goal." The concept of peer-to-peer or near-peer conflict encompasses great power conflict; however, this term can also apply to military confrontation between non-great powers (for example, regional powers). As with great power conflict, peer-to-peer or near-peer conflict can entail threats of the use of force, displays of force, and actual uses of force.

¹⁰ Bear F. Braumoeller, "Systemic Politics and the Origins of Great Power Conflict," American Political Science Review 102, no. 1 (2008): 77.

Daniel M. Jones, Stuart A. Bremer, and J. David Singer, "Militarized Interstate Disputes, 1812-1992: Rationale, Coding Rules, and Empirical Patterns," Conflict Management and Peace Science 15, no. 2 (1996): 170.

¹² Ibid.

¹³ Ibid., p. 172.

¹⁴ Ibid., p. 171-173.

¹⁵ Thomas S. Szayna, The Emergence of Peer Competitors: a Framework of Analysis (Santa Monica, CA: RAND, 2001), p. xii.

Large-scale combat operations are direct, extended major military confrontations between two or more states. As the US Department of the Army Field Manual 3-0 (FM 3-0) defines the term, large-scale combat operations "occur in the form of major operations and campaigns aimed at defeating an enemy's armed forces and military capabilities in support of national objectives." FM 3-0 also states, "Large-scale combat operations are intense, lethal, and brutal. Their conditions include complexity, chaos, fear, violence, fatigue, and uncertainty." Future large-scale combat operations, FM 3-0 articulates, are also likely to be multi-domain in nature, entailing conflict in "air, land, maritime, space, and the information environment (including cyberspace)." ¹⁸

<u>Proxy warfare</u> is defined as a conflict in which "a major power instigates or plays a major role in supporting and directing a party to a conflict but does only a small portion of the actual fighting itself." There are multiple ways for states to directly or indirectly engage in proxy conflict, including through partnered military operations; arms transfers; and financial, logistical, or political support.²⁰

<u>Humanitarian action</u> refers to activities aiming to "assist people affected by disasters due to natural hazards or armed conflict, and seek to enhance the safeguarding of their rights." These activities are guided by humanitarian principles, the core four of which are humanity (alleviating suffering wherever it is found), impartiality (basing programming on needs and prioritizing the most vulnerable), neutrality (refraining from taking sides in a conflict), and independence (maintaining autonomy from other actors).²²

<u>Humanitarian access</u> refers to "both access by humanitarian actors to people in need of assistance and protection and access by those in need to the goods and services essential for their survival and health, in a manner consistent with core humanitarian principles." The dual-pronged definition of humanitarian access places attention on two interrelated issues: 1) from the perspective of humanitarian organizations, the extent to which the response environment enables their ability to implement programming; and 2) from the perspective of people affected by large-scale emergencies, the extent to which their needs can be met, whether by humanitarian organizations or through other means.

¹⁶ United States Department of the Army, Field Manual No. 3-0: Operations, October 6, 2017, p. 1-1.

¹⁷ Ibid., p. 1-4.

¹⁸ Ibid., p. 1-23.

¹⁹ Daniel L. Byman, "Why Engage in Proxy War? A State's Perspective," Brookings, May 21, 2018, https://www.brookings.edu/blog/order-from-chaos/2018/05/21/why-engage-in-proxy-war-a-states-perspective/.

²⁰ "Understanding Support Relationships," International Committee of the Red Cross, https://sri.icrc.org/understanding-support.

[&]quot;Humanitarian Action 101," InterAction, https://www.interaction.org/wp-content/uploads/2019/04/Humanitarian-Action-101.pdf. The word 'humanitarian' has a certain degree of inherent ambiguity, and there are no definitive parameters to delineate organizations and activities considered 'humanitarian' from those that are not. For an overview of the history of the term, 'humanitarianism,' see Craig Calhoun, "The Imperative to Reduce Suffering: Charity, Progress, and Emergencies in the Field of Humanitarian Action," in Humanitarianism in Question, eds. Michael Barnett and Thomas G. Weiss (Ithaca: Cornell University Press, 2008), 73-142.

²² See "OCHA on Message: Humanitarian Principles," United Nations Office for the Coordination of Humanitarian Affairs, June 2012, https://www.unocha.org/sites/dms/Documents/OOM-humanitarianprinciples_eng_June12.pdf.

²³ Swiss Federal Department of Foreign Affairs, Humanitarian Access in Situations of Armed Conflict: Handbook on the International Normative Framework, Version 2, December 2014, p. 13, https://reliefweb.int/report/world/humanitarian-access-situations-armed-conflict-hand-book-international-normative.

B. Methodology

This report's findings are based on the authors' analysis of relevant existing literature (including desk reviews on humanitarian access, historical and contemporary concepts of great power competition and conflict, and the state of training and preparations for future conflict), virtual focus group discussions that the authors convened, and semi-structured interviews conducted with key informants. Between the focus group sessions and key informant interviews, the research team captured perspectives from 37 humanitarian, military, academic, and government stakeholders. Military stakeholders included active duty, reservist, and retired service members. Academic stakeholders included individuals engaged in teaching and research. Additionally, multiple research participants have previous relevant or dual-hatted professional experience, for example, a former government stakeholder who now works with an academic institution or a current humanitarian practitioner with prior military service.

The research team interviewed five key informants and engaged 32 stakeholders across three focus group sessions, each of which engaged a different set of stakeholders. Each focus group session lasted approximately an hour and a half, and semi-structured interviews lasted between 25 and 45 minutes. The focus group sessions and semi-structured interviews were conducted under Chatham House rules. Participants understood that identifiable information and organizational affiliations would not be included in any publications resulting from the research. The research team analyzed data from the focus groups and interviews using NVivo, a qualitative data analysis software. Two members of the research team coded all transcripts from focus groups and interviews using inductive analysis to capture patterns in themes, topics, and concepts across the data.

The research team convened the first two virtual focus group sessions in May 2021. The first focus group session had 11 participants and the second focus group session had 10 participants. Each focus group included a combination of humanitarian, military, academic, and government stakeholders. Participants were identified primarily through pre-existing networks, in particular drawing from members of the Protection of Civilians Working Group, the Aid Worker Security Working Group, and the Humanitarian Access Working Group, all of which are associated with the Civilian-Military Humanitarian Response Workshop convened annually by the Center for Human Rights and Humanitarian Studies at Brown University and the US Naval War College Civilian-Military Humanitarian Response Program. All members of these working groups have extensive experience and/or expertise in humanitarian response. Additional selected experts on humanitarian access and/or humanitarian civil-military coordination were also invited to participate in these sessions.

The third virtual focus group session, which had 12 participants, was convened in August 2021 in collaboration with the Humanitarian Advisory Group, which co-hosted the session. The aim of this third session was to capture the particular perspectives of experts knowledgeable about and/or working on relevant issues in the Asia-Pacific region. This focus group was composed solely of humanitarian, military, academic, and government stakeholders based in Australia.

Before each focus group session, the research team drafted and disseminated a briefing document to participants that offered an overview of key concepts and articulated a set of questions intended to frame

the discussion. The briefing document did not specify a particular scenario to orient participants' comments. Rather, participants were prompted to speak more generally about their perspectives on possible future great power conflict and large-scale combat scenarios. The geopolitical contest between the United States and China/Russia framed much of the discussions, with a focus on imagining what future large-scale combat operations would look like between these actors. However, participants also discussed other possible large-scale combat operations scenarios, in particular, involving peer-to-peer or near-peer conflict between regional powers. Additionally, participants discussed proxy warfare, drawing connections to conflicts already seen today. The scope of this report reflects this somewhat loose framing in terms of scenarios, while centering the analysis on the intersection between great power conflict and large-scale combat operations.

Finally, it is important to highlight that the focus group participants and semi-structured interview subjects do not constitute a representative sample of a broader population of humanitarian, military, and/or governmental actors. The sampling was purposive, aiming to collect perspectives from actors already working on or thinking about these subjects or in a position to offer expert commentary. Two important limitations are that the sample skews humanitarian (a limited set of military actors participated in the research) and Western (the sample drew largely from people in the United States, the United Kingdom, various European countries, and Australia). The research team hopes that this initial report will prompt future research to build on this foundation (for example, by engaging more deeply with military actors, as well as non-Western policy actors, practitioners, and experts, in particular, from China and Russia).

Part II | The Shifting Geopolitical and Security Landscape

This section offers an overview of the shifting current geopolitical context and the potential implications for possible future conflict scenarios. The section proceeds in three parts. The first part, as a point of departure, examines how the US, over the past several years, has embraced a strategic shift toward great power competition. The second part addresses perspectives and developments from China and Russia. The third part discusses different perspectives on the likelihood of large-scale combat operations and how and why such conflicts might arise.

A. The United States' Strategic Shift Toward Great Power Competition

Over the past several years, the US has formally reoriented its national security and foreign policy strategy toward great power competition. The 2015 National Military Strategy indicated the resurgence of great power

competition,²⁴ and the 2017 National Security Strategy and 2018 National Defense Strategy cemented the shift, identifying China and Russia as the main priorities for the US Department of Defense.²⁵ The 2021 Interim National Security Strategic Guidance—as noted in this report's introduction—retained this focus on great power competition, although the US has embraced 'strategic competition' as a framing device.²⁶

Further illustrating the shift toward great power competition, US Secretary of Defense Lloyd Austin at his confirmation hearing called China "the most significant threat going forward" and noted that the US has "seen [China] do a number of things that tend to make us believe that China wants to be the preeminent power in the world in the not too-distant future."²⁷ Austin asserted that China "is clearly a competitor that we have to make sure that we begin to check their aggression."²⁸ Moreover, in September 2021, US Department of Defense Policy Chief Colin Kahl acknowledged the short-term threat that Russia poses to the US, stating, "In the coming years, Russia may actually represent the primary security challenge that we face in the military domain for the United States and certainly for Europe," continuing, "Russia is an increasingly assertive adversary that remains determined to enhance its global influence and play a disruptive role on the global stage, including through attempts to divide the West."²⁹

US service-specific posture statements and command guidance documents reflect this focus on great power competition and conflict.³⁰ For example, the 2021 budget submission for the US Department of the Air Force seeks to align the Air Forces' portfolios and develop operational concepts in accordance with the National Defense Strategy, such as investing in logistics that can support rapid deployment of forces to forward locations and the generation of combat power.³¹ The US also seeks to limit the influence of China and Russia by repositioning its forces and upgrading military capabilities, especially in the Indo-Pacific region (to counter China) and the North Atlantic (through the reestablishment of the US Navy's Second Fleet, responsible for the US east coast and the North Atlantic Ocean).³²

²⁴ US Department of Defense, The National Military Strategy of the United States of America 2015, The United States Military's Contribution To National Security, June 2015, p. i, 1-4.

²⁵ Office of the President, National Security Strategy of the United States of America, December 2017, p. 55; US Department of Defense, Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge, undated but released January 2018, p. 1, https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf,

²⁶ Daniel Lipmann, Lara Seligman, Alexander Ward and Quint Forgey, "Biden's Era of 'Strategic Competition," Politico, October 5, 2021, https://www.politico.com/newsletters/national-security-daily/2021/10/05/bidens-era-of-strategic-competition-494588.

²⁷ US Congress, Senate, Committee on Armed Services, Confirmation Hearing on the Expected Nomination of Lloyd J. Austin III to be Secretary of Defense, 117th Cong., 1st. sess., 2021, https://www.armed-services.senate.gov/imo/media/doc/21-02_01-19-20211.pdf.

²⁸ Ibid.

²⁹ Jim Garamone, "DOD Policy Chief Kahl Discusses Strategic Competition With Baltic Allies," Department of Defense, September 17, 2021, https://www.defense.gov/News/News-Stories/Article/Article/2780661/dod-policy-chief-kahl-discusses-strategic-competition-with-baltic-allies/.

³⁰ "CNO Gilday Releases Guidance to the Fleet; Focuses on Warfighting, Warfighters, and the Future Navy," US Navy, December 4, 2019, https://www.navy.mil/Press-Office/Press-Releases/display-pressreleases/Article/2237608/cno-gilday-releases-guidance-to-the-fleet-focus-es-on-warfighting-warfighters-an/.

³¹ The Honorable Barbara Barrett and General David L. Goldfein, United States Air Force Posture Statement Fiscal Year 2021, United States Air Force Presentation to the Armed Services Committee of the United States Senate, 116th Cong., 2nd Sess., 2021, https://www.armed-services.senate.gov/imo/media/doc/Barrett--Goldfein_03-03-20.pdf. The United States Air Force Posture Statement Fiscal Year 2021 reference to the NDS refers to the 2018 NDS, as the 2021 Interim NDS had not been released yet.

³² Jeffrey Goldberg, "The Obama Doctrine," The Atlantic, April 2016, https://www.theatlantic.com/magazine/archive/2016/04/the-obama-doctrine/471525/#2; Marian Faa and Prianka Srinivasan, "Pentagon pushes for Pacific missile defence site to counter China's threat to the US," Australian News Broadcast, March 18, 2021, https://www.abc.net.au/news/2021-03-19/united-states-pentagon-missile-defence-guam-counter-china/100015900. See Sam LaGrone, "Navy Reestablishes U.S. 2nd Fleet to Face Russian Threat; Plan Calls for 250 Person Command in

US preparations for future conflict, including in the form of large-scale combat operations, also involve prioritizing investments in developing advanced technology for future warfare, such as autonomous weapons, artificial intelligence, and hypersonic weapons. According to a Congressional Research Report released in October 2021, "The United States is the leader in developing many of these technologies. However, China and Russia—key strategic competitors—are making steady progress in developing advanced military technologies. As these technologies are integrated into foreign and domestic military forces and deployed, they could hold significant implications for the future of international security writ large..."³³

Furthermore, the need to prepare and train for large-scale combat operations is communicated across various US Department of Defense documents—including doctrine and training initiatives—and war-gaming exercises are already underway.³⁴ One has to look no further than to FM 3-0 (the aforementioned US Army field manual published in 2017) to understand how the US Army, and the US military more broadly, is anticipating this possibility. FM 3-0 asserts, "While the U.S. Army must be manned, equipped, and trained to operate across the range of military operations, large-scale ground combat against a peer threat represents the most significant readiness requirement."³⁵

B. Perspectives and Developments from China and Russia

Chinese perspectives on the great power paradigm clash with those from the US. Chinese leaders and foreign policy scholars generally reject the framework of great power conflict to describe Sino-American relations. For example, in commentary published by the China Institute of International Studies in 2020, Teng Jianqun framed the notion of strategic competition between the US and China as a dishonest American rhetorical device, writing that US air and naval activities in the Asia-Pacific region "are part of what the US calls 'strategic competition' with China; equally, these could be seen as preparations for a possible future war close to the Chinese mainland." Some Chinese scholars, such as Wang Jisi, believe that strategic competition between China and the US is the "inevitable" outcome of a situation in which the US "cannot accept" the view that

Norfolk," USNI News, May 4, 2018, https://news.usni.org/2018/05/04/navy-reestablishes-2nd-fleet-plan-calls-for-250-person-command-in-norfolk, which discusses the explicit link between the reestablishment of the Second Fleet and great power competition. In particular, Chief of Naval Operations Admiral John Richardson has stated, "Our national defense strategy makes clear that we're back in an era of great power competition as the security environment continues to grow more challenging and complex...That's why today, we're standing up 2nd Fleet to address these changes, particularly in the North Atlantic."

³³ US Library of Congress, Congressional Research Service, Emerging Military Technologies:

Background and Issues for Congress, by Kelley M. Sayler, R46458 (2021), https://crsreports.congress.gov/product/pdf/R/R46458, p. i. ³⁴ For an example of doctrine, see United States Department of the Army, U.S. Army in Multi-Domain Operations 2028, TRADOC 525-3-1 (Washington, DC: Department of the Army, 2018), https://permanent.fdlp.gov/gpo114669/TP525-3-1_30Nov2018.pdf. On training, in October 2021, the US Army held its course for division and staff officers to develop the "skills needed to plan successful large-scale combat operations in the major urban areas." See John Spencer, "The US Army's First Urban Warfare Planners Course," Modern War Institute, https://mwi.usma.edu/the-us-armys-first-urban-warfare-planners-course/. For war games conducted as a component of US preparations for responding to a possible Chinese seizure of Taiwan and/or surrounding islands, see Valerie Insinna, "A US Air Force War Game Shows What the Service Needs to Hold Off—or Win Against—China in 2030," Defense News, April 12, 2021, https://www.defensenews.com/training-sim/2021/04/12/a-us-air-force-war-game-shows-what-the-service-needs-to-hold-off-or-win-against-china-in-2030/; and Chris Dougherty, Jennie Matuschak and Ripley Hunter, "The Poison Frog Strategy: Preventing a Chinese Fait Accompli Against Taiwanese Islands," Center for a New American Security, October 2021, https://www.cnas.org/publications/reports/the-poison-frog-strategy.

³⁵ United States Department of the Army, Field Manual No. 3-0: Operations, October 6, 2017, p. ix.

³⁶ Teng Jianqun, "Regional Security Outlook 2021," China Institute of International Studies, December 23, 2020, https://www.ciis.org.cn/english/COMMENTARIES/202012/t20201223_7692.html.

American prestige on the world stage declined after the 2008 financial crisis and is "unwilling to acknowledge its weakness vis-a-vis China." As noted earlier in this report, Chinese President Xi Jinping has promoted the framework of a 'New Type of Great Power Relationship' between China and the US, a rubric that the US has not embraced due to concern that it is tantamount to accepting China's rise.³⁸

In the military realm, China now has the largest navy in the world and has land-based conventional ballistic and cruise missiles that outnumber and outperform those of the US in terms of range.³⁹ The People's Liberation Army (PLA)—through equipment and systems modernization, historical analysis, information collection, and training—is preparing for low and high intensity conflicts.⁴⁰ The US Defense Intelligence Agency "estimates the core strengths of the PLA to be long-range fires, information warfare, and nuclear capabilities. Furthermore, it acknowledges the PLA's ever-improving power-projection capabilities and SOF [special operations forces]."⁴¹ China is also investing heavily in 'anti-access' or 'area denial' capabilities aimed at blocking the United States' naval access to the western Pacific, specifically the waters that surround China's coastline.⁴²

Russia's self-identification as a great power is well established. In fact, a RAND report notes, "Russia has consistently described itself as a great power. At a minimum, this vision includes Russia's desire to participate in deciding global issues and to have a sphere of influence in its region."⁴³ However, Russian scholarship conceptualizes Russia as a unique state that cannot be understood through the paradigms of Western theories. Mariya Y. Omelicheva and Lidiya Zubytska write, "Kremlin authorities have tried to define and defend Russia's great power identity by rejecting and downgrading what they view as alien to Russia. The anti-Western and anti-American discourses and policies have been central to this approach."⁴⁴ These perspectives influence Russian foreign policy and academic discourse, which views a unipolar international system under US dominance as "destabilizing," particularly to Russian security.⁴⁵ Rather, Russian foreign policy promotes a multipolar system, in which Russia retains special roles and rights based on its great power status.⁴⁶

Russia is also rapidly modernizing its military and building up its capacity for conflict. According to Michael Kofman and Andrea Kendall-Taylor, "Today, the Russian military is at its highest level of readiness, mobility,

³⁷ Minghao Zhao, "Is a New Cold War Inevitable? Chinese Perspectives on US–China Strategic Competition," The Chinese Journal of International Politics 12, no. 3 (2019): 371–394.

³⁸ Cheng Li and Lucy Xu, "Chinese Enthusiasm and American Cynicism Over the 'New Type of Great Power Relations," Brookings, December 4, 2014, https://www.brookings.edu/opinions/chinese-enthusiasm-and-american-cynicism-over-the-new-type-of-great-power-relations/.

³⁹ US Department of Defense, Annual Report to Congress: Military and Security Developments Involving the People's Republic of China (Washington, D.C.: Department of Defense, 2020), https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/1/2020-DOD-CHINA-MILITARY-POWER-REPORT-FINAL.PDF, p. ii and vi.

⁴⁰ Paul Erickson, "Competition and Conflict: Implications for Maneuver Brigades," Modern War Institute, June 2021, p. 32, https://mwi.usma.edu/wp-content/uploads/2021/06/Competition-and-Conflict-Implications-for-Maneuver-Brigades.pdf.

⁴¹ Ibid., p. 21.

⁴² Mike Yeo, "China's Missile and Space Tech is Creating a Defensive Bubble Difficult to Penetrate," Defense News, June 1, 2020, https://www.defensenews.com/global/asia-pacific/2020/06/01/chinas-missile-and-space-tech-is-creating-a-defensive-bubble-difficult-to-penetrate/.

⁴³ Andrew Radin and Clint Reach, Russian Views of the International Order (Santa Monica, CA: RAND, 2017), p. 15.

⁴⁴ Mariya Y. Omelicheva and Lidiya Zubytska, "An Unending Quest for Russia's Place in the World: The Discursive Co-Evolution of the Study and Practice of International Relations in Russia," New Perspectives 24, no. 1 (2016): 20.

⁴⁵ Ibid, p. 34.

⁴⁶ Radin, Russian Views, p. 17.

and technical capability in decades."⁴⁷ Over the last decade, Russia has upgraded its ground forces, which include motorized, mechanized, and armored units with the missions of "forcible entry and holding and seizing territory," as a Modern War Institute report notes.⁴⁸ A Congressional Research Service report also states that these forces "emphasize mobility and are increasingly capable of conducting short but complex, high-tempo operations."⁴⁹ However, the report continues, ground forces remain a relatively low funding priority for Russia in comparison to "massed artillery, rocket fire, and armored forces," all of which have been crucial to Russia's engagement in Ukraine and Syria.⁵⁰

Russia has also deployed cyber and information operations in numerous contexts.⁵¹ Indeed, Russia's preferred methods of warfare, encapsulated by the so-called Gerasimov Doctrine, are "nonmilitary means" of instigating chaos and instability in foreign states (such as information warfare) supplemented by "military means of a concealed character."⁵² Russia also remains a nuclear peer competitor with the US, and its proximity means that its long-range conventional missile capabilities pose a unique and significant threat to the US.⁵³

C. Where Will It All Lead? The Possibility of Large-Scale Combat Operations

Where will these developments lead? Future military confrontations could assume many forms, ranging from grey zone conflict (measures short of armed conflict, including election interference or disinformation campaigns) to head-to-head military combat.⁵⁴ In FM 3-0, the US Army puts forth: "The proliferation of advanced technologies; adversary emphasis on force training, modernization, and professionalization; the rise of revisionist, revanchist, and extremist ideologies; and the ever increasing speed of human interaction makes large-scale ground combat more lethal, and more likely, than it has been in a generation."⁵⁵ However, analysts disagree about the likelihood of large-scale combat operations occurring. Some believe that great power contestation will fizzle out, predicting that one or more of these states (the US, China, and/or Russia)

⁴⁷ Michael Kofman and Andrea Kendall-Taylor, "The Myth of Russian Decline: Why Moscow Will be a Persistent Power," Foreign Affairs, November/December, 2021, p. 142-152, https://www.proquest.com/magazines/myth-russian-decline-why-moscow-will-be/docview/2584599186/se-2?accountid=9758.

⁴⁸ Erickson, "Competition and Conflict."

⁴⁹ US Library of Congress, Congressional Research Service, Russian Armed Forces: Capabilities, by Andrew S. Bowen, IFII589 (2020), https://fas.org/sgp/crs/row/IF11589.pdf.

⁵⁰ Ibid.

⁵¹ For an example of Russia using cyber and information operations, see Sarah P. White, "Understanding Cyberwarfare: Lessons from the Russia-Georgia War," Modern War Institute, March 20, 2018, https://mwi.usma.edu/understanding-cyberwarfare-lessons-russia-georgia-war/, which notes that "overt cyberspace attacks...were relatively well synchronized with conventional military operations" by Russia against Georgia in 2008.

⁵² Molly K. McKew, "The Gerasimov Doctrine," Politico, September/October 2017, https://www.politico.com/magazine/story/2017/09/05/gerasimov-doctrine-russia-foreign-policy-215538/.

⁵³ Eugene Rumer and Richard Sokolsky, "Grand Illusions: The Impact of Misperceptions About Russia on U.S. Policy," Carnegie Endowment for International Peace, June 30, 2021, https://carnegieendowment.org/2021/06/30/grand-illusions-impact-of-misperceptions-about-russia-on-u.s.-policy-pub-84845; and Kofman, "Myth of Russian Decline." Additionally, for an analysis of strategic foresight within the Russian government, see Andrew Monaghan, "How Russia Does Foresight: Where is the World Going?" European Union Institute for Security Studies, 2021, https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief_1_2021_0.pdf.

⁵⁴ On grey zone conflict, see "Competing in the Gray Zone: Countering Competition in the Space between War and Peace," Center for Strategic and International Studies, https://www.csis.org/features/competing-gray-zone.

⁵⁵ U.S. Department of the Army, Field Manual No. 3-0: Operations, October 6, 2017; and "Analysis: Americans Think Conflict with China is Possible but Unlikely," Center for Strategic and International Studies, https://chinasurvey.csis.org/analysis/china-conflict-possible-but-unlikely/.

will implode or lose their geopolitical standing.⁵⁶ Others believe the trend of geopolitical competition will continue yet disagree on the likelihood of all-out warfare.⁵⁷

Few scholars assert that any great power is likely to purposefully initiate large-scale combat operations with another near-peer competitor in the coming decades, especially given the high perceived risks of such a conflict. Yet, the probability of large-scale combat operations between great powers is certainly not negligible, especially given the possibility of inadvertent escalations and miscalculations. In *The Senkaku Paradox: Risking Great Power Over Small Stakes*, Michael E. O'Hanlon argues that the most plausible scenario in which large-scale combat operations between the US, China, and Russia might occur would be an initially low-stakes conflict (what O'Hanlon refers to as a "localized crisis") that escalates into full-fledged war.⁵⁸ Similarly, in the 2010 book, *The China Dream: The Great Power Thinking and Strategic Positioning of China in the Post-American Era*, retired PLA officer Liu Mingfu argues that China will ultimately surpass the US in geopolitical power and that no matter how peacefully it seeks to do so, dramatic head-to-head conflict between the US and China in the coming decades is inevitable.⁵⁹

Indeed, tensions between the US and China exist in multiple geographic areas of the Asia-Pacific region and beyond, including Taiwan, the South China Sea, and the West Pacific. 60 Each of these tension points has the potential to escalate as a result of purposeful, inadvertent, or miscalculated actions. Although the contemplation of possible confrontations between the US and China often dominated discourse throughout focus group sessions and key informant interviews conducted for this research, significant US-Russian tensions persist as well. Indeed, tensions have particularly escalated in the context of Russia's large-scale invasion of Ukraine in February 2022.

Regardless of debates among scholars and analysts about where exactly these developments will lead, the US, China, and Russia are all bolstering their capabilities for future military combat in the context of great power competition. The rest of this report examines the potential implications of possible future large-scale combat operations on the humanitarian response environment, with a specific focus on humanitarian access.

⁵⁶ For example, see George Friedman, *The Next 100 Years: A Forecast for the 21st Century* (New York: Anchor Books, 2009), which articulates a prediction that neither China nor Russia will continue to rise and that both will implode during the 21st Century. Also see Alfred W. McCoy, *In the Shadows of the American Century: The Rise and Decline of U.S. Global Power* (Chicago: Haymarket Books, 2017), which examines the possibility that US power will decline over the course of the 21st century.

⁵⁷ For various perspectives, see, for example, John Mearsheimer, "The Inevitable Rivalry: America, China, and the Tragedy of Great-Power Politics," Foreign Affairs, November/December 2021, https://www.foreignaffairs.com/articles/china/2021-10-19/inevitable-rivalry-cold-war; and Charles C. Krulak and Alex Friedman, "The US and China are not Destined for War," Australian Strategic Policy Institute, August 24, 2021, https://www.aspistrategist.org.au/the-us-and-china-are-not-destined-for-war/.

⁵⁸ Michael E. O'Hanlon, "Introduction: Expanding the Competitive Space," In *The Senkaku Paradox: Risking Great Power War Over Small Stakes*, p. 1-18 (Washington, D.C.: Brookings Institution Press, 2019), http://www.jstor.org/stable/10.7864/j.ctv3znzxb.7.

⁵⁹ Liu Mingfu, *The China Dream: The Great Power Thinking and Strategic Positioning of China in the Post-American Era* (Beijing: CN Times Books, 2010). English translation published in 2015.

⁶⁰ The US believes that China wishes to have the capability to seize Taiwan by 2027. See Sam LaGrone, "Milley: China Wants Capability to Take Taiwan by 2027, Sees No Near-term Intent to Invade," USNI News, June 23, 2021, https://news.usni.org/2021/06/23/milley-china-wants-capability-to-take-taiwan-by-2027-sees-no-near-term-intent-to-invade.

Part III Envisioning Possible Future Large-Scale Combat Operations

This section presents potential characteristics of future large-scale combat operations, including conventional military confrontation, as well as cyber and information operations, during great power conflict.⁶¹ The section draws on perspectives from the focus group discussions and semi-structured interviews, as well as relevant literature. In particular, this section discusses: 1) perceptions regarding key actors, geographic scope, and duration; 2) the fast-paced, lethal, and destructive nature of future large-scale combat operations; and 3) the role of information and cyber operations.

A. Key Actors, Geographic Scope, and Duration

Research participants strongly expressed the expectation that large-scale combat operations will entail a combination of direct large-scale military confrontation and indirect confrontation through the use of proxies, with great powers funding, arming, and working with and through other armed actors. Third-party actors (state and non-state) are anticipated to play a significant role.⁶²

Generally, research participants discussed the possibility of a global conflict of an unbounded nature, vast in geographic scope, playing out across multiple domains: air, land, sea, space, and cyberspace. Such a conflict would differ from current conflicts due its metastatic nature, quickly expanding to secondary locations, including to territories not necessarily in direct geographic proximity to the origin of fighting.⁶³ Some participants contemplated the possibility of an attack on the US, Chinese, or Russian homelands, although other research participants doubted the likelihood of this possibility, placing focus on tertiary locations. Nevertheless, there is an expectation that great power conflict would directly impact domestic populations, given the likelihood of adversaries deploying cyber-attacks and information operations (discussed in greater detail below). One research participant offered the following reflection:

I personally think that the conflict will look nothing like recent conflicts of the last twenty, thirty, forty years in terms of the scope and scale of violence... The unbounded nature of it is something that governments, populations and militaries will find difficult to stop. There's a lot of planning going on at the moment, but in terms of how it compares: no comparison at all.

⁶¹ See Sandor Fabian, "Irregular versus Conventional Warfare: A Dichotomous Misconception," Modern War Institute, 2021, https://mwi.usma.edu/irregular-versus-conventional-warfare-a-dichotomous-misconception/.

⁶² As noted in the "Methodology" section of this report, discussions with research participants were loosely focused on the possibility of future conflict between the US versus China and/or Russia, but participants also raised the possibility of large-scale combat operations arising between regional powers.

⁶³ See David C. Gompert, Astrid Stuth Cevallos, and Cristina L. Garafola, War with China: Thinking Through the Unthinkable (Santa Monica, CA: RAND, 2016), p. 27, https://www.rand.org/content/dam/rand/pubs/research_reports/RR1100/RR1140/RAND_RR1140.pdf, which notes, "In modern history, wars involving great and more or less evenly matched powers have sucked in numerous third parties (not just prewar allies), lasted years, metastasized to other regions, and forced belligerents to shift their economies to a war footing and their societies to a war psyche."

This kind of warfare would engender a variety of challenges for conflict de-escalation. First, as noted, the destabilizing global consequences of great power conflict could draw in other third-party actors, with the metastatic nature of the conflict causing military operations to expand and evolve in unpredictable ways. Second, proxy forces, driven by their own sets of objectives, might continue to pursue these objectives even after tensions between great powers have been mitigated or resolved, further complicating efforts to contain or end the military conflict. Third, a lack of clarity about who is responsible for certain actions during military operations that involve proxies could complicate diplomatic engagement efforts. This set of challenges, combined with the peer or near-peer nature of states' capabilities, could prevent a quick and decisive end to military conflict.

B. Fast-Paced, Lethal, and Destructive

Large-scale combat operations, should they occur, are likely to be intentionally chaotic, intense, lethal, and destructive. Research participants likened the humanitarian consequences of such a conflict to those of World War II. Indeed, large-scale combat operations will cause extensive damage to civilian infrastructure, particularly if armed actors target civilian infrastructure in their conduct of this 'total war.' The impacts on civilians will amplify feelings of the conflict being "more like an existential crisis rather than a discretionary crisis," as one research participant stated. In the words of another research participant, "If we move to total war, it's not a war of choice, it's all in, and will involve everybody and go until someone wins." The result will be that the "population will be targeted from both sides to destroy the will of both countries," a research participant asserted. Furthermore, within this context, there is an expectation that states will pursue whole-of-nation mobilization efforts to support their military operations.⁶⁴

Research participants expressed mixed views on the extent to which international humanitarian law (IHL) would effectively limit the effects of such an armed conflict. On the one hand, some research participants argued that states will have an incentive to respect IHL for reasons that include promoting reciprocity and claiming moral legitimacy. On the other hand, many participants envisioned peer-to-peer conflict between great powers as relatively unconstrained by IHL, with states viewing humanitarian considerations (including civilian protection) to be secondary or tertiary concerns in the context of total warfare. These research participants expected great powers to violate IHL both unintentionally (resulting from a chaotic, fast-paced conflict environment) and intentionally (for example, targeting civilians and civilian objects protected by IHL as part of a deliberate warfighting strategy).⁶⁵

⁶⁴ See Gompert, Cevallos, and Garafola, War with China, p. 27-28, which paints the following picture of possible war between the United States and China: "Whole populations suspend normal life; large fractions of them are prepared or forced to throw their weight behind their nation's fight. Not just states but opposing ideologies, worldviews, and political systems might be pitted against each other. Whatever their initial causes, such wars' outcomes might determine which great powers and their blocs survive as such. Prewar international systems collapse or are transformed to serve the victors' interests. Thus, the costs of failing outweigh those of fighting."

⁶⁵ See Shane Reeves and Robert Lawless, "Reexamining the Law of War for Great Power Competition," Articles of War, January 27, 2021, https://lieber.westpoint.edu/reexamining-the-law-of-war-for-great-power-competition/; Lt. Col. John Cherry, Sqn. Ldr. Kieran Tinkler and Michael Schmitt, "Avoiding Collateral Damage on the Battlefield," Just Security, February 11, 2021, https://www.justsecurity.org/74619/avoid-ing-collateral-damage-on-the-battlefield/; and Lt. Gen. Charles Pede and Col. Peter Hayden, "The Eighteenth Gap: Preserving the Commander's Legal Maneuver Space on 'Battlefield Next;" Military Review: The Professional Journal of the U.S. Army, March-April 2021, https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/March-April-2021/Pede-The-18th-Gap/.

Within the context of large-scale combat operations, research participants discussed that armed actors may be very unlikely to support implementing humanitarian pauses or humanitarian corridors, which if implemented could offer an opportunity for militaries to re-position, re-supply, and potentially conduct other operations during the pause. This reluctance to support humanitarian pauses or corridors would be compounded by states' motivations to refrain from ceasing operations until the opposing side is completely defeated.

Research participants also predicted that the tempo and lethality of operations will require local governments (spanning national to municipal levels) and civilian populations to remain constantly vigilant to threats to their safety and will require civilians to take actions to protect themselves. In other words, fast-paced warfare will place pressure on local governments, civilians themselves, and the humanitarian sector to ensure that populations, even before the eruption of conflict, are prepared to weather threats to civilian protection.

C. Cyber and Information Operations

States, militaries, and non-state actors in great power conflict may pursue multiple types of operations simultaneously, with conventional military operations conducted along with cyber and information operations. Cyber-attacks cost little to carry out compared to conventional military operations, especially in light of their ability to inflict extensive damage on critical infrastructure, disrupt government and military operations, and impact civilian populations in various ways, including by hindering access to basic services. Determining who is responsible for such attacks (also known as cyber attribution) is a time and resource-intensive process. 88

Further exacerbating the destruction and confusion inherent in fast-paced large-scale combat operations, information operations could be widely used to limit access to necessary data, promote disinformation, and control political and military narratives relevant to the conflict. In the words of one research participant, "Trying to control that narrative, to be seen as the provider of aid and the adversary as the uncaring, illegitimate, discredited power will be more important." These operations may directly or indirectly affect civilian populations, including by seeking to influence public opinion on the conflict and those involved.

All information platforms are vulnerable to this type of instrumentalization, but social media was of particular interest to research participants. As one research participant underscored, reflecting on the possibility of a conflict on the scale of World War II, but with contemporary cyber and information warfare elements also mixed in, "If we're looking on those kinds of scales, I think, one of the things that we've never faced

^{66 &}quot;Glossary of Terms: Pauses During Conflict," United Nations Office for the Coordination of Humanitarian Affairs, June 2011, https://www.unocha.org/sites/unocha/files/dms/Documents/AccessMechanisms.pdf.

⁶⁷ For discussion and resources on the intersection between cyber operations and IHL, see Laurent Gisel, Tilman Rodenhäuser, and Knut Dörmann, "Twenty Years On: International Humanitarian Law and the Protection of Civilians Against the Effects of Cyber Operations During Armed Conflicts," International Review of the Red Cross 102, no. 913 (2020): 287-334; "Cyber Operations During Armed Conflicts," International Committee of the Red Cross, https://www.icrc.org/en/war-and-law/conduct-hostilities/cyber-warfare; and "Cyber Warfare: Does International Humanitarian Law Apply?" International Committee of the Red Cross, February 25, 2021, https://www.icrc.org/en/document/cyber-warfare-and-international-humanitarian-law; and Michael N. Schmitt (ed), Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations (New York: Cambridge University Press, 2017).

⁶⁸ United States, Office of the Director of National Intelligence, A Guide to Cyber Attribution (Washington, D.C.: Office of the Director of National Intelligence, 2018), https://www.dni.gov/files/CTIIC/documents/ODNI_A_Guide_to_Cyber_Attribution.pdf.

before in those huge contexts is the impact of social media. The psychological operations and the scare factor that dimension might bring to us would be a consideration from the outset." There are also possible intersections in the information and space domains, in particular, relating to targeting satellites to interfere with communication abilities.

Part IV Humanitarian Access Challenges During Large-Scale Combat Operations

Considering the conflict characteristics presented in the previous section, this section discusses the humanitarian access challenges likely to arise in future large-scale combat operations, in particular, during crises arising from great power conflict. This analysis draws primarily on the views articulated during focus group discussions and key informant interviews. The section first offers a broad overview of the challenging nature of humanitarian access during large-scale combat operations. The section then delves more deeply into particular access issues, categorized in terms of three types of challenges: 1) political, 2) operational, and 3) tactical.

A. The Humanitarian Access Environment: An Overview

During future large-scale combat operations, the high tempo of operations, combatants' employment of conventional and advanced weapons, and the wide scope of affected areas spanning multiple domains—air, land, sea, cyber, and space—are likely to affect civilian populations at a level unseen in recent humanitarian crises. Indeed, the fast-paced, devastating, and continuous nature of the conflict will directly impact civilians' ability to survive, a view captured by one research participant, who stated:

The population will remain faced with the question of how they will survive such a scenario and how they can make sure that, even if they're physically safe—outside of the areas of conflict, shooting, and bombing—how can they be sure they will get the minimum goods and services they need whilst in those locations?

Another research participant concurred, reflecting, in particular, on the 'total war' approach that may be adopted during large-scale combat operations:

This is going to be an ongoing conflict. This is not going to be, like, you rest for the night. We expect this to be an ongoing thing, 24/7 until it's done. So it's fast paced, very definite in terms of what it needs to achieve, which is the neutralization of the other. And for the population, this is going to be a difficult situation or scenario for them to be in.

One can certainly draw lessons from recent highly politicized access contexts in which global and/or regional powers have had a significant stake (e.g., Syria, Yemen, and Ukraine). However, challenges to humanitarian access in great power conflict, particularly large-scale combat operations, will far exceed the scale, scope, and complexity of access obstacles encountered in current and recent contexts. The dynamics of large-scale combat operations are likely to not only exacerbate existing challenges but also result in new, and at times unprecedented, access challenges for humanitarian actors and civilian populations.

There was a nearly universal perspective shared among research participants that military operations will result in a scale and level of violence that yields a significant number of civilian injuries and casualties, threats to life and safety, and destruction of critical infrastructure. These effects are especially important to consider, as militaries and humanitarian organizations anticipate that future conflicts are likely to occur in urban environments, with disproportionate impacts on civilian populations, including their ability to access goods and services.⁶⁹

The remainder of this section examines challenges that humanitarian organizations may encounter in trying to access civilians in need. This analysis divides these challenges into the following three categories:

- **1. Political challenges** relating to high-level political or strategic engagements, often involving issues relating to the norms or values that undergird humanitarian action.
- **2. Operational challenges** relating to developing and planning practical and procedural methods for activities or operations that align with broader political and strategic goals.
- **3. Tactical challenges** relating to implementing operational arrangements while also responding to ground-level issues, which can change rapidly.

These three categories broadly align with analytical distinctions found in literature on humanitarian negotiation, military planning, logistics, and organizational management.⁷⁰ These categories are also interrelated and potentially overlapping.⁷¹ For example, politicized perceptions of international humanitarian

⁶⁹ Margarita Konaev and John Spencer, "The Era of Urban Warfare is Already Here," Foreign Policy Research Institute, March 21, 2018, https://www.fpri.org/article/2018/03/the-era-of-urban-warfare-is-already-here/.

To For relevant literature on humanitarian negotiation, see Field Manual on Frontline Negotiation (Geneva, Switzerland: Centre of Competence on Humanitarian Negotiation, 2019), which presents three types of humanitarian negotiation: political, professional, and technical; and the Humanitarian Negotiation Handbook (Geneva, Switzerland: Centre for Humanitarian Dialogue, 2004), which discusses three levels at which humanitarian negotiations occur: high-level strategic, mid-level operational, ground-level frontline. For military perspectives on these three levels (commonly labeled in military publications as strategic, operational, and tactical), as well as information about the historical development of this framework, see Georgii Samoilovich Isserson, The Evolution of Operational Art (Fort Leavenworth, KS: Combat Studies Institute Press, 2013), https://permanent.fdlp.gov/gpo88396/OperationalArt.pdf; USAF College of Aerospace Doctrine, Research and Education (CADRE), "Three Levels of War," Air and Space Power Mentoring Guide, Vol. 1 (Maxwell AFB, AL: Air University Press, 1997), https://faculty.cc.gatech.edu/~tpilsch/INTA4803TP/Articles/Three%20Levels%20of%20War=CADRE-excerpt.pdf; and John R. Deni, "Maintaining Transatlantic Strategic, Operational and Tactical Interoperability in an Era of Austerity," International Affairs 90, no. 3 (2014): 583–600. For examples in which other fields have used a similar framework, see G. Schmidt & Wilbert E. Wilhelm, "Strategic, Tactical and Operational Decisions in Multi-National Logistics Networks: A Review and Discussion of Modelling Issues," International Journal of Production Research 38, no. 7 (2000): 1501–1523; and Roger Kaufman, Jerry Herman, and Kathi Watters, Educational Planning: Strategic, Tactical, Operational (Lanham, MD: Scarecrow Press, 2002).

⁷¹ See CADRE, "Three Levels of War," which notes, "The boundaries of the levels of war and conflict tend to blur and do not necessarily correspond to levels of command."

actors can lead to tensions in high-level political engagements, spiraling into operational challenges (such as governments instrumentalizing bureaucratic procedures to control humanitarian activities) and tactical challenges (as frontline humanitarians grapple with ad hoc restrictions, for example, during checkpoint negotiations). Conversely, ground-level tensions between humanitarian and military actors can escalate into issues that operational-level and political-level actors seek to address.

In light of the inter-related and potentially overlapping nature of these categories, there are opportunities for humanitarian actors, governments, militaries, other armed actors, and donors to work across and transcend divides that often exist between these categories. An implication is the importance of coordination between actors engaged in high-level diplomatic interactions, mid-level operational planning, and frontline implementation. Nevertheless, the analysis below situates particular access challenges within specific categories, even if certain elements are relevant to other categories as well. Table 1 (below) lays out these humanitarian access issues. The rest of this section offers details and analysis.

Table 1: Anticipated Humanitarian Access Challenges During Large-Scale Combat Operations

Political Challenges

Limited impact of highlevel multilateral political engagements

Politicized government perceptions of the international humanitarian actors

Relationship deficits with potential state actors

Operational Challenges

Bureaucratic impediments and donor restrictions

Limited operational role of traditional international humanitarian actors

Devising processes to manage humanitarian insecurity

Tactical Challenges

Managing access and logistics across multiple domains with limited resources

Physical and digital threats to aid worker security

B. Political Humanitarian Access Challenges

Limited Impact of High-Level Multilateral Political Engagements

The geopolitically charged nature of peer-to-peer conflict is expected to create significant challenges for high-level humanitarian advocacy efforts, including possibly curtailing their impact, especially in the context of the United Nations (UN) Security Council. The reality is not new that political will, particularly that of state actors, plays a powerfully disproportionate role in determining the extent to which humanitarian organizations are able to operate. However, these dynamics are likely to be heightened and intensified, especially if one envisions a World War II style conflict. One research participant lamented this particular dynamic, describing

how the already grave political conditionality on humanitarian access in certain contexts would turn even graver during great power conflict:

Without the political will, you have no access. That includes the Security Council, bilateral advocacy, member states... You see it today with Ethiopia that when there's no political will, there's not much movement. We can only imagine that, when there's a great power conflict, the political stakes are much, much higher, the political will is much slower or smaller, and the leverage you have on any advocacy that can be possible is diminished. You can only imagine that, in that situation, advocacy at a high level is almost moot or not very helpful.

These difficulties will be especially acute if UN Security Council Member States—in particular, the five permanent members, or P5 (China, France, Russia, the United Kingdom, and the US), each of whom has veto power over Security Council resolutions—are direct parties to the conflict or have a substantial political stake (in the context of proxy warfare, for example). Additionally, Security Council Member States are also significant humanitarian donors (the humanitarian financing landscape remains dominated by Western states). To One should expect the Security Council, which is already hyper-politicized even in the absence of a large-scale military confrontation between P5 members, to be of limited utility in such a scenario, as gridlock will likely render engagement in this forum to be futile. Humanitarian access "would indeed be extremely challenging, especially from a UN-related humanitarian response, because it is intrinsically tied to Member State interests, to Member State political will, and the bodies that go along with it. How the UN system is set up is that a certain group of Member States have a large say on how things happen," a research participant stated.

Large-scale combat operations between great powers would be a test of the entire UN system. The result would be, a research participant predicted, "either the making or breaking of the UN." Since the establishment of the UN, the world has seen only minimal direct confrontation between P5 Member States. It is quite possible that a great power conflict of substantial scale and duration could fundamentally undermine the ability of the UN system to function and even survive. Not mincing words, a research participant emphasized that the notion of large-scale conflict between P5 Security Council Member States "is an existential threat to the order of what has governed humanitarianism. It's a major collapse of the foundations we take for granted."

Politicized Government Perceptions of International Humanitarian Actors

Limited engagement or outright stalemate in the Security Council, and the UN more broadly, could result in an increased need for humanitarian actors to rely on bilateral engagement with states to negotiate access. This scenario further underscores the role of political will in humanitarian access, especially given the possibility

⁷² See Fran Girling and Angus Urquhart, "Global Humanitarian Assistance Report 2021," Development Initiatives, p. 48, https://devinit.org/documents/1008/Global-Humanitarian-Assistance-Report-2021.pdf, which notes that the top five public donors of humanitarian assistance in 2020 were the United States, Turkey, Germany, the European Union, and the United Kingdom. However, non-traditional donors, including Gulf states (such as Saudi Arabia, Qatar, United Arab Emirates, and Kuwait) and private sector actors are likely to play an important role in the future of humanitarian financing. See Barnaby Willitts-King and Alexandra Spencer, "Reducing the Humanitarian Financing Gap: Review of Progress Since the Report of the High-Level Panel on Humanitarian Financing," Humanitarian Policy Group, April 2021, p. 41-42, https://cdn.odi.org/media/documents/Reducing_the_humanitarian_financing_gap_WEB.pdf.

that host states will leverage arguments rooted in sovereignty to deny or intentionally delay access, despite provisions found within IHL.⁷³

Moreover, in a conflict involving the US, Russia, and/or China, the world's major international humanitarian organizations may struggle to operate in light of their perceived geopolitical affinities and alignments. Many organizations associated with the Western-dominated international humanitarian system may not easily access Russian- or Chinese-controlled territory due to concerns about organizations' perceived alignment with Western interests (particularly those of the US). Western nationals working for humanitarian organizations may struggle to gain entry for this same reason. Conversely, Western nationals will likely harbor similar suspicions of Russian and Chinese humanitarian efforts. In the words of one research participant:

Look at traditional norms of humanitarian actors... They're all Western-based, and the Russians would almost certainly not consider them as neutral. Being able to find a humanitarian actor with, in theory, free movement around the battlespace, would be difficult. The West is incredibly suspicious about Russian humanitarian organizations, we invariably assume they would be used for nefarious purposes.

Especially in the absence of meaningful high-level diplomatic engagement on humanitarian issues, humanitarian organizations may struggle in their bilateral engagements on access with parties to the conflict. The result, for many international humanitarian organizations, will be great difficulties in implementing principled humanitarian action. Research participants anticipated that impartiality, neutrality, and independence will all be challenging to actualize, given the likely inability for most organizations to effectively operate on all sides of the conflict. One research participant posited that humanitarian actors will not have the "luxury to choose to do principled actions" during large-scale combat operations and will "very quickly slide into 'any means possible.'"

There is already a growing discourse about potentially rethinking the utility and content of humanitarian principles.⁷⁴ The debates among humanitarians around continuing with the principles versus rethinking or abandoning some or all of them will be particularly acute should conflict between great powers emerge. As parties to the conflict may view humanitarian organizations with politicized suspicions, humanitarians will likely find themselves engaging in organizational and sector-wide debates about how they can and should engage with the politics of the conflict, what role humanitarian principles should play, and what types of compromises on principles are appropriate. These dynamics would also have significant implications for local humanitarian actors, as explored in more detail below.

⁷³ See "Rule 55. Access for Humanitarian Relief to Civilians in Need," Customary IHL Database, International Committee of the Red Cross, https://ihl-databases.icrc.org/customary-ihl/eng/docindex/v1_rul_rule55.

⁷⁴ For example, see Matthew Clark and Brett W. Paris, "Vale the Humanitarian Principles: New Principles for a New Environment," Working Paper 001, The Humanitarian Leader, Centre for Humanitarian Leadership, 2019, https://ojs.deakin.edu.au/index.php/thl/article/view/1032/1021; Hugo Slim, "You Don't Have to be Neutral to be a Good Humanitarian," The New Humanitarian, August 27, 2020, https://www.thenewhumanitarian.org/opinion/2021/7/12/three-challenges-for-humanitarian-impartiality.

The New Humanitarian, July 12, 2021, https://www.thenewhumanitarian.org/opinion/2021/7/12/three-challenges-for-humanitarian-impartiality.

Relationship Deficits with Potential State Actors

Relationships between humanitarian actors and parties to armed conflict—those pre-existing and those that can be cultivated after crises emerge—enable fruitful multilateral and bilateral engagements on humanitarian access. As one participant stated, "In the end, access isn't a technical science. It's a lot of common sense and your ability to finagle your way into things and situations and scenarios. A large part of that is relationships and engagements." Indeed, existing literature emphasizes the role of cultivating relationships—building rapport and trust, as well as mutual understanding of organizational capacities, competencies, and ways of working—as a means of negotiating humanitarian access and promoting norms of IHL. These engagements can sensitize state actors on humanitarian norms, using these relationships as a means of humanitarian persuasion. Proactively building relationships before a crisis emerges can also help humanitarian organizations gain access to the right decision-makers to address humanitarian response challenges.

A key challenge identified by research participants is a lack of sufficient relationship-building efforts by many humanitarian actors towards key actors, such as China and Russia. In the words of one research participant:

If we're moving into a space of multipolar authorities, it's the obligation of the humanitarian community to have conversations with everybody. We have to be able to understand the strategic thinking, interests and thresholds of different actors... If China and Russia are the other actors in the room, we really need to start having conversations with them.

The purpose of such proactive engagements would be to build rapport and to cultivate a broader understanding of the US, China, and Russia as potential future interlocutors, including these states' approaches to engaging with the international humanitarian system. On this issue, one research participant asked rhetorically, "How many NGOs know that Russia and China view humanitarianism in a different sense to how they view it?... Education is lacking across the humanitarian space" on this issue. Research participants firmly articulated the importance of proactive engagements so that humanitarians at least gain the possibility of mitigating humanitarian risks and emphasizing the importance of prioritizing humanitarian

⁷⁵ See Deborah Mancini-Griffoli and André Picot, Humanitarian Negotiation: A Handbook for Securing Access, Assistance and Protection for Civilians, Centre for Humanitarian Dialogue, October 2004, https://hdcentre.org/wp-content/uploads/2016/07/Humanitarian-Negotiation-Humanitarian Negotiation: Five Analytical Approaches, Advanced Training Program on Humanitarian Action, Humanitarian Academy at Harvard, https://reliefweb.int/sites/reliefweb.int/sites/reliefweb.int/files/resources/understanding_humanitarian_negotiation-five_analytical_approaches_0.pdf; Fiona Terry and Brian McQuinn, "Roots of Restraint in War," International Committee of the Red Cross, June 2018, https://reliefweb.int/sites/reliefweb.int/sites/reliefweb.int/files/resources/4352_002_The-roots-of-restraint_WEB.pdf; and Rob Grace, "The Humanitarian as Negotiator Developing Capacity Across the Aid Sector," Negotiation Journal 36, no. 1 (2020): 28-29.

⁷⁶ On China's approach to humanitarian action, see "Positive Disruption? China's Humanitarian Aid," Humanitarian Advisory Group, December 2019, p. 7, https://humanitarianadvisorygroup.org/wp-content/uploads/2020/12/HH_China-Practice-Paper_Final-December-2019.pdf, which discusses, among other issues, how China views humanitarian aid as inherently linked to development; funds humanitarian aid in an ad hoc manner, as opposed to publicly articulating a humanitarian policy structure; and offers funding bilaterally, as opposed to through multilateral mechanism. On Russia's approach to humanitarian action, with a focus on Syria, see Marika Sosnowski and Paul Hastings, "Exploring Russia's Humanitarian Intervention in Syria," Fikra Forum, June 25, 2019, https://www.atlanticrouncil.org/blogs/menasource/mapping-russias-soft-power-efforts-in-syria-through-humanitarian-aid/; and Jonathan Robinson, "Russian Aid in Syria: An Underestimated Instrument of Soft Power," Atlantic Council, December 14, 2020, https://www.atlanticcouncil.org/blogs/menasource/russian-aid-in-syria-an-underestimated-instrument-of-soft-power/.

concerns. In the words of one research participant, "We're probably ten years too late on engagement with China, but better to start now than miss the moment altogether."

Another research participant emphasized the importance of sustained relationship-building efforts between humanitarian and military actors specifically, recommending "continuing that engagement with the military... about who humanitarians are, what our roles and responsibilities are in the contexts where we find ourselves, the unique capabilities that military can use to support humanitarian action, but also the dangers of the military being used to deliver humanitarian assistance when civilian capabilities are available and preferred." Indeed, building relationships between humanitarian and military actors, when appropriate and based on contextually specific guidance, is a core component of humanitarian civil-military relations.

C. Operational Access Challenges

Bureaucratic Impediments and Donor Restrictions

During large-scale combat operations, it is possible that humanitarian organizations may find themselves caught within a web of access restrictions imposed by various states on how humanitarians can operate and to whom relief organizations can direct programing. These challenges may arise from, first, host states instrumentalizing bureaucratic procedures as a tool to control humanitarian programming, and second, donor states imposing restrictions on whom humanitarian organizations can serve and even engage. Given the anticipated limited impact of high-level diplomatic engagements in resolving these issues, this set of challenges will fall to individual organizations to manage in an ad hoc manner.

Turning first to bureaucratic control mechanisms in contemporary contexts, host states have used bureaucratic control mechanisms to restrict or delay humanitarian aid through a variety of means. States financially exploit humanitarian actors through excessive taxes and fees, impose burdensome documentation and reporting requirements, maintain strict control over the importation of humanitarian aid and equipment, and dictate which humanitarian personnel can enter or remain in the country.⁷⁷ Bureaucratic impediments can also affect populations seeking to access goods and services by impacting the ease of registration processes, for example. In light of the highly politicized nature of the operational environment, including suspicions of humanitarian organizations' geopolitical alignments and intentions, as one research participant described, these obstacles will likely "get harder and harder" in the context of large-scale combat operations.

Counterterrorism restrictions may constitute another likely impediment during large-scale combat operations. Although large-scale combat operations evoke an emphasis on states and traditional militaries, such a

⁷⁷ Jacob D. Kurtzer, Denial, Delay, Diversion: Tackling Access Challenges in an Evolving Humanitarian Landscape (Washington, D.C.: Center for Strategic and International Studies, 2020), p. 16, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/Kurtzer_DenialDe-layDiversion_WEB_FINAL.pdf. For an examination of ethical dilemmas that arise regarding obstacles of establishing presence in a country (such as NGO registration and acquiring visas for staff), see Marika Sosnowski and Paul Hastings, "Assad Regime Maintains Strangle-hold Over Humanitarian Access in Syria," The New Arab, January 22, 2019, https://english.alaraby.co.uk/opinion/assad-regime-maintains-strangle-hold-over-humanitarian-access-syria. For guidance on navigating issues of bureaucratic obstruction, see "Understanding and Addressing Bureaucratic and Administrative Impediments to Humanitarian Action: Framework for a System-wide Approach," Inter-Agency Standing Committee, January 2022, <a href="https://interagencystandingcommittee.org/system/files/2022-01/IASC%20Guidance%20Understanding%20and%20Addressing%20Bureaucratic%20and%20Administrative%20Impediments%20to%20Humanitarian%20Action_Framework%20for%20a%20System-wide%20Approach.pdf.

scenario will also likely involve a wide range of non-state armed groups, including proxy forces, as previously noted. Similar to bureaucratic restrictions imposed by host states, counterterrorism restrictions imposed on humanitarian organizations by donor governments will mean, as one research participant articulated, that "resources that are already constrained will be even more constrained" in the context of great power conflict involving proxy forces and other types of non-state armed groups.

Limited Operational Role of Traditional International Humanitarian Actors

The analysis presented thus far yields an operational picture in which militaries and governments directly and indirectly involved in the conflict seek to control what areas international humanitarian actors can access through various political, bureaucratic, legal, and security means, including the wholesale denial of entry to countries or areas where military operations are ongoing. The implication is that some traditional international humanitarian actors will very likely have a limited operational role. Funding limitations could further fuel this dynamic. Research participants articulated concerns that the largest humanitarian donor states, if embroiled in armed combat, might not prioritize humanitarian financing, choosing instead to devote state resources to warfighting efforts.

Research participants voiced the possibility that certain large international humanitarian organizations—for example, the International Committee of the Red Cross or Médecins Sans Frontières—might find viable avenues for access given their global reputations as principled humanitarian actors. However, there is a general expectation that the largest international humanitarian organizations will generally struggle to operate. In the words of one research participant, it is "safe to assume the closer you get to confrontation, the adequacy of the humanitarian system, which is stitched together precariously, will be quickly exceeded."

Consequently, in the words of one research participant, "the most important actors will be local humanitarian actors," including national societies of the Red Cross and Red Crescent Movement, who are able to provide goods and services to affected civilian populations in this context. Speaking to the massive scale of such a conflict, another research participant added, "Given the size and scope and number of theaters and different environments that this will be conducted over, this will be local, regional at best. The scope is beyond real thought." Another research participant added that it will be a "very positive strength in the midst of great power conflict for local entities to respond locally to the immediate impact, wherever that takes place."

In acknowledging the critical role that local humanitarian actors may play in responding to needs, research participants also discussed the role that humanitarian principles—especially neutrality—will play in response conducted by local actors in this type of conflict. Just as international humanitarian actors will face questions about their neutrality, local humanitarian actors will likely confront similar challenges and concerns as well, especially given their anticipated central role in providing assistance to affected communities.⁷⁸

⁷⁸ For debates and discussion about the principle of neutrality in the context of Myanmar in the wake of the February 2021 coup, see Khin Ohmar, "There's Nothing Neutral about Engaging with Myanmar's Military," The New Humanitarian, July 28, 2021, https://www.thenewhumanitarian, "Choosing Sides: Five Local Takes on Aid Neutrality in Myanmar," The New Humanitarian, August 25, 2021, https://www.thenewhumanitarian.org/feature/2021/8/25/Myanmar-coup-humanitarian-neutrality-local-aid.

The humanitarian sector's localization efforts thus far have fallen well short of expectations despite high levels of policy attention, including commitments made as part of the Grand Bargain, which was launched at the World Humanitarian Summit in 2016. Currently, only a small proportion (3.1 percent in 2020) of international humanitarian assistance goes directly to local and national actors.⁷⁹ Donor unwillingness to fund local organizations, the overall slow and reactive nature of the international humanitarian system, and the reluctance of some large humanitarian organizations to increase local ownership all play a role in stymying progress. One research participant, pondering how international humanitarian actors can best prepare for the difficulties of large-scale combat operations during great power conflict, offered the following reflection:

You need to let go of that pedestal and decentralize and give the authority... but also delegate response to other actors. That's how we best prepare... preparing for a scenario where we're letting go. It sounds odd, but preparing for a scenario where we're not involved... Preparing for a scenario where local populations are more involved... If our end is not just for us to be involved but to save lives, that's what we need to do.

Indeed, if international humanitarian organizations are unable to gain sufficient access, the success of humanitarian efforts could very well hinge on a more robust sector-wide embrace of the localization agenda.

Devising Processes to Manage Humanitarian Insecurity

The chaotic, fast-paced, and complex nature of the conflict is likely to make it difficult for both humanitarian organizations and militaries to maintain mutual awareness of the operational picture in terms of who is doing what and where. These dynamics could affect the efficacy and efficiency of coordination and information sharing mechanisms, such as humanitarian notification systems, an especially important challenge considering the unpredictable and insecure nature of the environment. Humanitarian organizations able to secure and maintain a presence will need to manage significant threats to operational security.

Possible operational challenges to military targeting systems and humanitarian notification systems—already plagued by a range of systemic challenges and failures—will fuel security risks for humanitarian actors and civilian populations. For example, research participants discussed an expectation that dynamic targeting will dominate, as deliberate targeting will be too difficult to conduct based on the chaotic and fast-paced nature of the conflict. As a result, one research participant said:

⁷⁹ Girling and Urquhart, "Global Humanitarian Assistance," p. 68.

⁸⁰ See Dave Phillips and Eric Schmidt, "How the U.S. Hid an Airstrike That Killed Dozens of Civilians in Syria," New York Times, November 13, 2021, https://www.nytimes.com/2021/11/13/us/us-airstrikes-civilian-deaths.html; Dave Phillips, Eric Schmidt, and Mark Mazzetti, "Civilian Deaths Mounted as Secret Unit Pounded ISIS," New York Times, December 12, 2021, https://www.nytimes.com/2021/12/12/us/civilian-deaths.html; Reveal Patterns of Failure in Deadly Strikes," New York Times, December 18, 2021, https://www.nytimes.com/interactive/2021/12/18/us/airstrikes-pentagon-records-civilian-deaths.html; and Azmat Khan, Haley Willis, Christoph Koettl, Christiaan Triebert and Lila Hassan, "Documents Reveal Basic Flaws in Pentagon Dismissals of Civilian Casualty Claims," New York Times, December 31, 2021, https://www.nytimes.com/2021/12/31/us/pentagon-airstrikes-syria-iraq.html; and Michael J. McNerney et al., "U.S. Department of Defense Civilian Casualty Policies and Procedures: An Independent Assessment," RAND, 2021, https://www.rand.org/pubs/research_reports/RRA418-1.html.

⁸¹ According to Merel A. C. Ekelhof, "There are two types of targeting: deliberate targeting and dynamic targeting. Dynamic targeting consists of the same steps, but is more responsive than deliberate targeting, since the process is used to prosecute targets that are identified too late to go through the deliberate targeting process. The dynamic targeting process is compressed in time." See Merel A. C. Ekelhof, "Lifting the Fog of Targeting: 'Autonomous Weapons' and Human Control through the Lens of Military Targeting," Naval War College Review 71, no. 3 (2018):

...as soon as you get into combat... you're looking at relying on the commander and the law of armed conflict for proportionality, which is a much cruder mechanism. That would become the dominant mode when looking at heavy metal warfare, less and less deliberate targeting. The ability to mitigate harm and limit damage becomes harder and harder the closer you get to an actual combat zone, people on the ground using proportionality to guide their own judgment on what is and isn't acceptable.

Another research participant underscored this sentiment: "The gloves will be off, and the environment so chaotic, that many mistakes will be made... we lose all command and control from a military perspective of tactical decisions being made with respect to weapons employment." In another research participant's pointed words, "If the notification systems have failed in Syria and Yemen—horrific conflicts, but arguably much less complex than potential large-scale combat operations against peer competitors—are notification systems even going to function in a great power conflict context?" A different research participant offered a similar viewpoint: "Not sure there's much room for optimism here. When we look at how we've managed [humanitarian notification systems] in some of the less demanding scenarios compared with the scale of challenges we'd face in a great power crisis, they are less in significance to the challenges we will face."

Additional complications in the effective implementation of humanitarian notification systems could include humanitarian actors refraining from using these systems due to concern that the data will be misused or ignored, states using humanitarian notification systems as a mechanism to control or restrict humanitarian access, and a lack of clear procedures following an attack on a notified site. Research participants also noted that the technological requirements of humanitarian notification systems, as well as other communication platforms for humanitarian and civilian actors to share information with one another, will likely fail or become unavailable due to internet outages. Indeed, information and communication blackouts due to government actors shutting down the internet is already a dynamic of contemporary armed conflict. Such communication platforms could even be deliberately targeted via cyber operations.

D. Tactical Access Challenges

Managing Access and Logistics Across Multiple Domains with Limited Resources

The multi-domain nature of great power conflict will impact humanitarian organizations seeking to move people and goods across various areas in order to provide services to civilian populations. Five key issues

^{61-95,} https://www.jstor.org/stable/26607067.

⁸² For a more in depth examination of these issues, see Grace, "Surmounting Contemporary Challenges," p. 34-37; and Rob Grace and Brittany Card, "Re-assessing the Civil-Military Coordination Service of the United Nations Office for the Coordination of Humanitarian Affairs: Findings and Recommendations Based on Partners' Perspectives," Center for Human Rights and Humanitarian Studies, Watson Institute for International and Public Affairs, Brown University, September 2020, p. 18-19, https://watson.brown.edu/chrhs/files/chrhs/imce/research/Re-assessing%20the%20Civil-Military%20Coordination%20Service_CHRHS%20Report.pdf; and Sara Miller, "The Conflict in Deconflicting: The Humanitarian Notification System for Deconfliction in Syria," Liaison 13, no. 1 (2021): 64-71, https://www.cfe-dmha.org/LinkClick.aspx?fileticket=ZY0LUUs74Uo%3d&portalid=0.

⁸³ For example, see Witney Schneidman, "Ethiopia, Human Rights, and the Internet," Brookings, June 15, 2021, https://www.brookings.edu/blog/africa-in-focus/2021/06/15/ethiopia-human-rights-and-the-internet/.

related to managing access and logistics at the tactical level with severe resource constraints may emerge. First, humanitarians may be required to operate across large geographic distances, traveling by air, over land, and by sea while hostilities are ongoing. As one research participant articulated:

The usual challenge we face in a fast-paced humanitarian emergency is the movement of goods and services. If there will be a sizable part of the population that needs humanitarian assistance, goods and services, these goods and services should be able to reach them—that's part of having access. The thing is, getting them to the people in need is going to be the main challenge, especially if airspace is constantly closed because of what's happening and travel by sea is not possible because of whatever ongoing sea battles are taking place.

Second, the conflict is expected to involve a significant maritime component. As a result, humanitarian organizations may be required to negotiate maritime access to provide services at sea or on land. Maritime warfare between vessels at sea will create physical access issues for humanitarian organizations who may not have the policies, procedures, or capabilities to respond to the sick and wounded at sea. Furthermore, one participant argued that, among many militaries and humanitarian organizations alike, there is a lack of widespread expertise and knowledge on IHL at sea, which could be an important limitation for humanitarians seeking to operate in a conflict with a significant maritime component.⁸⁴

Third, access depends on the availability of logistics capabilities to move people, goods and services. At the local level, militaries or governments may direct logistics capabilities and resources toward warfighting efforts. One research participant pondered, "Even if humanitarian organizations gain access, I wonder where they'll get the physical logistics from. All local availability will be snapped up immediately. It's not a small issue." Indeed, another research participant surmised that a key role of humanitarian civil-military coordination will be supporting the logistics of humanitarian operations through negotiations with militaries and identifying logistics capabilities, including commercial options.

Competition between military and civilian actors for spaces and infrastructure, especially medical facilities, could further limit humanitarians' means of providing assistance to affected populations. One research participant discussed how the number of anticipated casualties—civilian and military—would likely overrun medical systems, meaning that military actors would need to use civilian hospitals to treat military casualties.

Fourth, at the global and regional level, logistics and supply chains on which humanitarian organizations rely for their operations are vulnerable to a variety of disruptions. One needs to look no further than the COVID-19 pandemic for a current example of an event that resulted in multi-sector disruptions and access restrictions at the global, regional, and local levels.⁸⁵ One could certainly expect such disruptions, should large-scale combat operations between great powers erupt.

⁸⁴ For an examination of challenges of operationalizing humanitarian principles at sea, with a focus on search and rescue operations for migrants in the Mediterranean Sea, see Eugenio Cusumano, "The Sea as Humanitarian Space: Non-governmental Search and Rescue Dilemmas on the Central Mediterranean Migratory Route," Mediterranean Politics 23, no. 3 (2018): 387-394.

⁸⁵ For an examination of how the COVID-19 pandemic affected humanitarian access, see Rebecca Brubaker, Adam Day, and Sophie Huvé, "COVID-19 and Humanitarian Access: How the Pandemic Should Provoke Systemic Change in the Global Humanitarian System," Centre for Policy Research, United Nations University, February 2021, http://collections.unu.edu/eserv/UNU:8033/UNU_COVIDandHumanitarian-Access_FINAL.pdf.

Fifth, critical infrastructure on which civilian populations rely—such as water systems, electrical grids, airports, seaports, and hospitals—may also be targeted through conventional means during large-scale combat operations and via cyber operations. Research participants highlighted that the targeting of critical infrastructure has already occurred in some contexts, albeit at a smaller scale than what is anticipated in future conflict.

Overall, the large-scale and high-tempo nature of the conflict, and the anticipated challenges at the political and operational levels, will lead to a dire situation for humanitarians, health response actors, and emergency managers working at the frontline level. Illustrating this reality, a research participant painted a sober portrait of the state of American federal and local emergency response systems, should such a conflict reach the United States: "We'd be on our own. We know this across the board. We have the National Guard, but they'd be pulled elsewhere... Medical resources would be strapped immediately... The scale of something like this would be unimaginable. We could be completely incapacitated."

Physical and Digital Threats to Aid Worker Security

Given the expected characteristics of this type of conflict, frontline humanitarian practitioners will likely find themselves navigating an insecure environment, engaging and negotiating with other ground-level actors to mitigate security risks. Moreover, due to the likelihood that unexploded ordnance will remain even after the conflict has ended, security risks will also be long-term, impacting the local population—as well as response actors engaged in recovery and rehabilitation—in areas where unexploded ordnance is present.

In addition to conventional threats, digital threats are likely to shape humanitarians' experiences in at least four ways. First, cyber-attacks on critical infrastructure, such as power grids or water supply systems, could further exacerbate humanitarian needs by depriving local populations of essential services. Impacts on critical infrastructure may also affect humanitarian organizations by disrupting services on which organizations rely, such as electricity, for conducting humanitarian operations. 87

Second, information and communication blackouts (imposed, for example, by governments for warfighting purposes) could affect the ability of humanitarian actors to gather information, analyze the operational context, and communicate across organizational lines or even internally. As one research participant detailed, "We're going to see the access issue most significantly in cyberspace: an adversary/peer competitor denying us ability to use an access node, or other nations/donors providing resources through interstate commerce or transactions. The problem will be one of communication and technological denial." Another research participant argued that the targeting of technological infrastructure through cyber operations will precede other types of operations, saying that the "initial phase is likely to be in a cyber domain, or a break out in the internet... We won't necessarily see the firebombing of London."

⁸⁶ For an examination of cyber security issues in contemporary conflict settings, see Ziad Al Achkar, "Digital Risk: How New Technologies Impact Acceptance and Raise New Challenges for NGOs," Global Interagency Security Forum, https://gisf.ngo/wp-content/uploads/2021/12/Digital Risk how new technologies impact acceptance and raise new challenges for NGOs.pdf.

⁸⁷ Laurent Gisel and Lukasz Olejnik, The Potential Human Cost of Cyber Operations, International Committee of the Red Cross, May 29, 2029, https://www.icrc.org/en/document/potential-human-cost-cyber-operations.

Third, misinformation, disinformation, or mal-information could negatively affect perceptions of humanitarian organizations, hindering their ability to gain and maintain humanitarian access. The challenging and uncertain information environment could also complicate various other aspects of humanitarian programing, including needs assessments and actor mapping undertaken as a component of an access strategy. This dimension could also complicate advocacy efforts—as humanitarian organizations and donors seek to influence states' approaches toward issues such as humanitarian access and civilian protection—given the need to sift through credible versus non-credible information sources.

Fourth, cyber security issues could fuel data protection concerns for humanitarian organizations and the civilian populations that they serve. Indeed, one research participant noted, "Data protection is going to be one of the key issues" during large-scale combat operations, especially given that such a conflict will involve "relatively sophisticated actors with a relatively good capacity to reach into and take the kind of data they might be looking for."

Part V | Conclusions and Recommendations

This section offers concluding comments and recommendations for humanitarian, government, and military actors to proactively prepare for the humanitarian response environment examined in this report. These recommendations are immediate steps that stakeholders can take now to help prepare for and mitigate the identified political, operational, and tactical humanitarian access challenges. Activities are currently already underway by governments and militaries to plan and prepare for potential great power conflict, including large-scale combat operations. However, the humanitarian sector remains generally limited in their proactive thinking, analysis, and planning for humanitarian response challenges likely to occur during large-scale combat operations. The below recommendations offer a pathway forward for filling these gaps. Additionally, although offered with the specific frame of great power conflict in mind, many of these recommendations have relevance for ongoing or more near-term response contexts in which humanitarian organizations are, or will be, engaged.

A. Develop Awareness in the Humanitarian Community about Possible Future Scenarios, Including Humanitarian Implications and Response Requirements

"It's never good to be behind the game, so I think planning ahead for seeing what could happen or what will happen in the next twenty, forty, fifty years, it's really important to say that these are issues humanitarians and humanitarian leaders should be thinking of, these are gaps that we see in our understanding or in our advocacy."

- Research Participant

There is an immediate need to raise awareness in the humanitarian community about possible future scenarios of great power conflict, including large-scale combat operations. Research participants emphasized that the majority of humanitarian organizations are currently not considering these future operating environments and how humanitarian operations may be impacted. The lack of considerations for large-scale combat operations and other types of conflict between great powers directly impacts how humanitarians understand the totality of their work, especially in terms of required advocacy and overall engagement with a wide array of relevant actors (host states, non-state armed groups, and donor governments) on issues of humanitarian access, response, and protection.

Scenario analysis and planning will help organizations understand what actions humanitarian organizations may need to undertake, in terms of both their internal and external operations, should such a conflict occur. In addition to conducting this work internally within individual organizations, there is a need for sector-wide collaboration to promote dialogue across organizations on these issues and identify conduits for information sharing. For example, organizations may find it useful to collaborate on their analysis and planning, especially as a means of incorporating multi-organizational perspectives. Indeed, initiatives already underway to promote foresight analysis and anticipatory action in the humanitarian sector may serve as models for developing efforts to understand the effects of great power conflict.⁸⁸

Research participants noted that the current design of the humanitarian planning cycle is often about the near-term estimated requirements of aid delivery, with inadequate attention paid to more long-term considerations about how future operating environments might bring forth different difficulties, including resource constraints. Furthermore, there was a resounding sentiment that many segments of the humanitarian sector largely undertake planning on a reactive, rather than a proactive, basis. This research makes clear that a shift in this mindset is essential for preparedness. However, there are notable constraints in operationalizing this approach, including funding and staffing.

To support this shift, multiple research participants noted that donors have the ability to direct funding towards political analysis, which organizations may use to inform humanitarian advocacy and policy engagements. The hiring of staff dedicated to conducting scenario planning will be essential for ensuring that this lens is incorporated into organizational work streams and planning. In particular, as noted by one

⁸⁸ Tiina Elise Neuvonen and Chris Earney, "Using Strategic Foresight to Shape Our Futures," UN Global Pulse, March 22, 2021, https://www.unglobalpulse.org/2021/03/using-strategic-foresight-to-shape-our-futures/

research participant, there is a need to hire staff who are "well versed in geopolitics, who can look through a geopolitical lens and do some critical analysis about scenario planning," with a specific eye toward anticipating new difficulties likely to arise in future response contexts.

The aim should be to continue to cultivate concerted efforts to improve knowledge amongst staff—at both the international and local levels—about what scenarios militaries and governments are contemplating in their planning and preparedness efforts. This process would inform how humanitarian actors too can engage in proactive planning and preparation.

B. Incorporate Humanitarian and Protection of Civilian Considerations into Military Planning

"There is a noticeable level of incorrect planning assumptions that humanitarian organizations will somehow be within the conflict area in numbers, capabilities, and there to carry out their core functions and to absorb many of the impacts of conflict that the military therefore don't need to concern themselves about....[There is a] need for the military to understand the challenges of the humanitarian landscape and to plan for those realities and not make incorrect assumptions."

- Research Participant

With military preparations and planning for large-scale combat operations underway, it is essential for militaries to understand the direct and indirect effects of military operations on civilian populations and on the ability of humanitarian organizations to operate in these environments. Unfortunately, previous research on the protection of civilians in great power conflict has highlighted that, "Conspicuously absent from policy and planning documents... is a clear-eyed assessment of the likely human costs of such a conflict or considerations for how to minimize civilian harm should the worst come to pass." Should conflict occur, the protection of civilians, including civilian harm mitigation, cannot come as a secondary or tertiary consideration to warfighting efforts. Furthermore, current challenges regarding targeting systems must be addressed, especially considering that future operating environments may compound already existing issues. Additionally, there is a continued need for militaries to work with partner forces to ensure respect for IHL and the protection of civilians, especially considering the potential role of proxy forces in future conflicts.

There is a particular need for military planners to review and interrogate the assumptions that are incorporated into planning efforts. Especially relevant are assumptions regarding the capacity and capability of humanitarian

⁸⁹ Brittany Card, Daniel R. Mahanty, Dave Polatty, Annie Shiel, and Paul Wise, "Anticipating the Human Costs of Great Power Conflict," Just Security, November 9, 2020, https://www.justsecurity.org/73107/anticipating-the-human-costs-of-great-power-conflict/. Additionally, a key finding of McNerney et al., "U.S. Department of Defense Civilian Casualty Policies and Procedures," p. x, is that "Combatant commands planning for high-intensity conflict against near-peer adversaries are unprepared to address civilian-harm issues."

⁹⁰ Larry Lewis, "Hidden Negligence: Aug. 29 Drone Strike is Just the Tip of the Iceberg," Just Security, November 9, 2021, https://www.justse-curity.org/78937/hidden-negligence-aug-29-drone-strike-is-just-the-tip-of-the-iceberg/.

⁹¹ For an example of existing research on this issue, see Melissa Dalton et al., "The Protection of Civilians in U.S. Partnered Operations," Center for Strategic and International Studies, Center for Civilians in Conflict, and InterAction, October 2018, https://www.interaction.org/wp-content/uploads/2019/02/the_protection_of_civilians_in_u.s. partnered operations october 2018 low.pdf.

organizations to operate in significantly violent and complex conflicts and the behavior of civilian populations in such environments. Incorrect planning assumptions—such as assuming that humanitarians will even have the capability to operate in these environments—not only jeopardize military operations but also can result in damaging effects on civilian populations and humanitarian actors. There are multiple avenues, such as education and joint exercises, through which militaries can engage with civilian and humanitarian actors in a principled way, as a means of informing planning efforts.

C. Build Relationships with Potential Future Parties to the Conflict

"One overarching concern around humanitarian access and the paradigm we're talking about here is really about access to the right decision makers at the right time, meaning to say: in the kind of conflict dynamic you're talking about, we'll be required to engage with a range of states and, as has rightly been mentioned, proxy actors, with whom maybe we don't have a long history of engagement."

- Research Participant

Humanitarian organizations must continue to make every effort to build deeper relationships and establish communication channels with actors that could have a role in future conflicts. In particular, multiple research participants acknowledged that many humanitarian organizations lack adequate relationships in China, including with government actors and national response organizations, that would be required to respond to a conflict in which China was directly or indirectly involved. Preexisting relationships, cultivated before conflicts even erupt, can better situate humanitarian organizations to engage effectively and efficiently with those who have direct influence over the conduct of military operations and who could influence, and potentially obstruct, humanitarian access to affected areas. Advocacy and humanitarian diplomacy with government and military actors, if possible and appropriate (see section below on humanitarian-military relations), regarding the anticipated humanitarian impacts of large-scale combat operations and great power conflict are essential.

Approaches to establishing relationships must be contextually driven and informed by an understanding of how different countries and organizations approach relationship building. For example, one participant highlighted that, as a means of solidifying trust and rapport, some countries prefer to engage the same staff over a long-term period. In such contexts, frequently rotating staff in and out of their positions would not be an effective strategy for engagement. Furthermore, not all humanitarian organizations will prefer or will be able to conduct direct engagement with various states. For such organizations, using a third-party interlocutor or establishing a collective forum might be preferable. Some research participants suggested that, in some contexts, the UN can play a unique role in engaging with governments directly about certain topics—civilian protection, for example—so that operational NGOs need not risk jeopardizing their current or future operations by engaging in direct dialogue on potentially sensitive issues.

D. Conduct Planning to Ensure the Continuity of Humanitarian Operations

"Time and resources will be even more scarce in great power conflict. We have to think about the appropriate level of upfront planning."

- Research Participant

Large-scale combat operations are expected to result in reverberating effects across the political, economic, security, and financial domains. Such a conflict will likely be highly disruptive to the ability of most humanitarian organizations to operate. Humanitarian organizations should understand and plan for how their internal and external operations may be affected in these contexts.

In particular, humanitarian organizations must consider how their operational model may entail a shift to decentralized operations or remote management, while grounded in support for a locally led response. This need may be especially pronounced considering the expectation of limited communication and restricted travel for staff. Furthermore, organizations' sub-offices and teams must be prepared to function independently and without capabilities to which they are accustomed. Research participants highlighted that the humanitarian sector is currently very reliant on services—such as GPS, electricity, and internet connectivity—that might be unavailable during large-scale conflict.

Preparation for these scenarios should include developing plans, policies, and procedures for continuing operations in the absence of these capabilities. For example, preparations can entail identifying, documenting, and disseminating plans regarding the usage and maintenance of primary and back-up methods of communication. To help prepare for these scenarios, staff training and exercises can teach and help maintain skills that may be needed, such as map reading, navigation, and radio communications. Institutionalizing the maintenance of plans and systems, such as through internal reporting and annual exercise requirements, can help ensure the maintenance of capabilities over time. Diversification of staff skills should also be complemented by the prioritization of recruiting staff members from diverse backgrounds with the language skills and cultural awareness to act as effective interlocutors with potential parties to the conflict.

Regarding plans for disruptions to external operations, there are, of course, many factors that organizations cannot anticipate. However, there is an overwhelming consensus that large-scale combat operations will be disruptive to logistics and supply chains at local, regional, and global levels. With this likelihood in mind, humanitarian organizations could perform point-to-point planning and exercises to understand the reverberating effects to their operations, informing decisions about developing contingency plans and prepositioning supplies.

Additionally, performing scenario and geopolitical analysis, as described above, may inform a contextually grounded analysis of how organizations can gain access and begin operations. This consideration is especially

⁹² For a publication offering guidance on this issue, see "Remote Humanitarian Management and Programming Guidance Note, May 2020," Humanitarian Advisory Group and CARE International, https://reliefweb.int/sites/reliefweb.int/files/resources/HH_PP_Guidance-Note_Remote-Management_electronic_FINAL.pdf.

important because, as one research participant stated, "In many of the likely conflict places, most humanitarian organizations have a light, if not zero, footprint to begin with: there's nothing to build upon." Ultimately, these dynamics further underscore the need for donors to increase direct funding to local and national organizations and for international humanitarian organizations to increase their support of local actors.

Finally, humanitarian organizations need to continue to invest and build capacity to protect data that they collect, store, and use as part of their operations, especially data related civilian populations who are receiving humanitarian assistance. As one research participant noted, "Many organizations operate large cloud networks and host everything from personally identifiable information to operational and location data in formats that are ripe for exploitation by any sophisticated state actor." Especially given that cyber-attacks are anticipated to be a key aspect of future conflict, humanitarian organizations must continue to promote, institutionalize, and develop humanitarian data protection standards and practices. Although this research is focused on the anticipated dynamics of future conflict, there are cyber-attacks occurring today against humanitarian organizations and their data. Proactively analyzing digital risks as part of planning efforts may help organizations understand the relationship between digital and physical risks to their operations, their staff, and those to whom they provide assistance.

E. Improve Humanitarian-Military Relations Through Education and Training

"From the CMCoord [humanitarian civil-military coordination] point of view, keeping up with the way warfare is changing...is very important."

- Research Participant

The relationships between humanitarian and military actors in large-scale combat operations are likely to be complex, varying in nature across different interlocutors, and potentially contentious. These dynamics are not new and have prompted the development of various conceptualizations of humanitarian-military relations, frameworks for guiding contextually-based engagements, and the establishment of dedicated staff within humanitarian, government, and military organizations to build relationships and, when appropriate, coordinate efforts. 6 Continuing to develop relationships between humanitarian and military actors is critical for preparing for potential interactions in a future great power conflict scenario.

There is a need to continue the education of military forces about humanitarian action, the roles and responsibilities of humanitarian organizations, and procedures for engagement during both natural hazard and armed conflict responses. Conversely, there is a need to develop the knowledge of humanitarian staff

⁹³ "Handbook on Data Protection in Humanitarian Action," International Committee of the Red Cross, Second Edition, June 11, 2020, https://www.icrc.org/en/publication/430501-handbook-data-protection-humanitarian-action-second-edition.

⁹⁴ See "Cyber-attack on ICRC: What We Know," International Committee of the Red Cross, January 25, 2022, https://www.icrc.org/en/document/cyber-attack-icrc-what-we-know, which states, "The ICRC determined on 18 January that servers hosting the personal information of more than 500,000 people receiving services from the Red Cross and Red Crescent Movement were compromised in a sophisticated cyber security attack."

⁹⁵ Robert Mardini, "The Dire Costs of Hacking the ICRC," The National, January 24, 2022, https://www.thenationalnews.com/opinion/comment/2022/01/25/when-we-get-hacked-people-could-die/.

⁹⁶ Grace, "Surmounting Contemporary Challenges."

regarding military operations, objectives, and constraints. Research participants emphasized that there is currently a limited understanding of the military in the humanitarian community, and where knowledge does exist, it is often limited to staff who were former military personnel now working for a humanitarian organization.

Civilian academic institutions can play a unique role by offering educational opportunities for humanitarian, military, and government actors. Additionally, academia can convene humanitarian, government, and military actors for engagements to advance dialogue and thought, with a particular focus on large-scale combat operations. As non-military and non-humanitarian venues, academic institutions can play a useful role in fostering dialogue, particularly on sensitive issues. There is also an opportunity to engage professional military education institutions to offer courses, lectures, or training for military students with a focus on humanitarian response in conflict. Such efforts can plug into pre-existing initiatives and courses on related topics, such as IHL, natural hazard response, and Women, Peace, and Security.

Building on the general education of staff, there is a critical need for strategic dialogue between humanitarian, military, and government actors on the humanitarian implications of great power conflict, including humanitarian principles, access, and IHL-related issues. In particular, strengthening relationships and generating buy-in from senior military and humanitarian leaders is essential. Commitments at the senior military level can influence strategic guidance and affect the conduct of operations. In the words of one research participant, "It really comes down to the commander telling their staff that this is a consideration."

Military training and exercises should include humanitarian considerations and perspectives and engage with subject matter experts from the humanitarian sector. Subject matter experts can be involved in various ways, such as offering inputs to exercise design, providing feedback on training objectives, and guest lecturing and co-hosting exercises and training. Involvement beginning with the initial planning phase helps ensure that humanitarian aspects are purposefully and thoughtfully incorporated from the onset, rather than as an afterthought. Integrating humanitarian considerations into military training and exercises will help ensure that training reflects the realities of the battlefield and that, when faced with these issues during conflict, military personnel will have already rehearsed addressing them.

In addition to improving operational readiness, training has various subsequent benefits, including building relationships and trust, sensitizing military actors to humanitarian concepts and actors, and ensuring that both sides understand one another's approaches, capacities, and limitations. Furthermore, joint engagements can be used, as previous research has highlighted, "to facilitate dialogue between humanitarian and military actors on nuanced topics, such as civilian protection in future warfare scenarios or the challenges that arise for humanitarian actors when a party to a conflict engages in relief efforts." Indeed, there is an urgent need to orient humanitarian-military relations toward preparing for and addressing the grave challenges highlighted throughout this report.

⁹⁷ Grace and Card, "Re-assessing the Civil-Military Coordination Service," p. 34.