

Chinese Disaster Relief Operations

Identifying Critical Capability Gaps

By NIRA V PATEL

The aftermath of the Sichuan earthquake relief efforts has uncovered significant capability gaps in the ability of the People's Liberation Army (PLA) to effectively and rapidly respond to major natural disasters. Exposure of these shortcomings provides a unique insight into China's capability to project power using its ground forces in large-scale contingency operations that require expansive logistics, planning, and interservice cooperation. The lack of an integrated relief campaign between the PLA Air Force (PLAAF) and PLA hindered the execution of the emergency relief orders issued by President Hu Jintao. This immediate and firm

response from the Chinese civilian leadership contrasts with the Chinese military's inefficient execution of the relief efforts. The revelation of these capability gaps pierces through an abundance of literature from Chinese news sources and leaders on the "total success" of relief operations to illuminate deficiencies that could affect Chinese military operations from kinetic to nontraditional to future relief efforts.

The now-famous pictures of Premier Wen Jiabao consoling newly orphaned children and parents who lost their children

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PLA soldiers participate in earthquake recovery effort, May 2008



UN Photo (Evan Schneider)

have been instrumental in allaying Sichuan residents' fears of government neglect and also conferring international praise on Beijing's communist government. When speaking to Chinese strategists on a recent trip to China, I found that respect and admiration for their government were palpable. It was as if China underwent a major political revolution but not through the barrel of a gun. For President Hu, the earthquake relief efforts have taken China one step closer to becoming a "harmonious society." This has also increased Beijing's standing as a "responsible stakeholder" in the international community. Witness, for example, Singaporean Prime Minister Lee Hsieng Loong's statement that the "Sichuan

Many of the deficits in PLA relief operations are attributed to a poorly integrated command structure, aging equipment, and personnel who are not trained to deal with humanitarian and disaster relief contingencies on the scale of the Sichuan earthquake. As one Chinese expert noted, the relief efforts were the equivalent of responding to a full-scale war.⁴ If this is the case, and on a logistical level it seems accurate, there is much to learn from China's disaster relief operations in terms of PLA capabilities and effectiveness in potential contingency operations.

Fundamental to discussions of a military-ascendant China is Beijing's ability to project power. The earthquake relief efforts have called

decade, the Politburo has slowly consolidated, centralized, and made efficient once archaic decisionmaking processes. Even though these reforms will likely take decades to be effectively internalized in the formal policymaking process, signs of fledging bureaucratic cultures are evident, particularly in the Ministry of Civil Affairs, whose response to the earthquake was textbook in nature. The relief efforts exposed major gaps between the actual political response and implementation and execution of the formal relief orders—an indication that even though the central government has a monopoly on power and influence, the bureaucratic system is slow to respond and execute large-scale military-led campaigns.



U.S. defense attaché and Chinese defense officials supervise unloading of U.S. relief supplies

U.S. Air Force (Chris Vadnais)

earthquake showed how much China has changed and offered a glimpse of its future: a more open and self-confident nation.²¹ Hsieng's praises were echoed by British Prime Minister Gordon Brown, who said that the Chinese leadership's response to the disaster in Sichuan was "nothing short of magnificent."²²

There is a growing disconnect between these perceptions about prompt decisions from the central government and the PLA's relief efforts in Sichuan Province. Many of these divergences are attributable to the central government's control over information dissemination, which has made analysis of the operations difficult at best. Government-controlled reports in China showcase successful PLA relief campaigns, while Western media reports (though limited in depth) and eyewitness accounts are citing tremendous shortcomings.³

into question many assumptions about Chinese capabilities. This article identifies shortcomings in the PLA's ability to respond to natural disasters, using the earthquake relief operations as a guide. The first part analyzes the effectiveness of China's decisionmaking authority. The second part seeks to determine capability gaps in the PLA's ability to respond to natural disasters while attempting to correlate these gaps with its ability to project power.

Decisionmaking Authority

It is important to differentiate the formal decisionmaking process from the PLA's response to the disaster itself. The Chinese government is highly compartmentalized, with the Politburo and the Standing Committee of the Chinese Communist Party being the most influential components.⁵ Over the last

the relief efforts exposed major gaps between the actual political response and implementation and execution of the formal relief orders

The government's response to the earthquakes displayed a highly integrated and streamlined response mechanism to natural disasters. This response was anchored in a decade-long effort to consolidate formal decisionmaking authorities for disaster relief operations. *The Law of the People's Republic of China on Earthquake Prevention and Disaster Reduction* and *The Law of the People's Republic of China on Flood Prevention* are just two examples of heightened bureaucratic awareness

in dealing with significant natural disasters.⁶ In 2003, the Ministry of Civil Affairs established the working *Rules of the Ministry of Civil Affairs in Response to Unexpected Natural Disasters*, which is meant to guide the central government's response to domestic natural mishaps.⁷ A complex web of authorities guides disaster relief efforts. China's response strategy is composed of a unified leadership—headed by President Hu—that controls the overall situation. At the regional level, various actors implement disaster relief strategies—in theory the regional government is considered the primary relief body, but in practice the PLA and central government seem to exercise greater control.⁸ This seems particularly obvious in the aftermath of the Sichuan earthquake.

The creation of disaster relief management architecture⁹ is in sharp contrast to the last major earthquake disaster relief operation conducted in Tangshan in 1976, where the government's response was slow, uncoordinated, and negligent. Signs of improvement in the decisionmaking process were on display prior to the May 2008 earthquakes. Immediately after the January 2008 blizzard left over 100 million Chinese stranded, the central government quickly allocated the necessary resources and authority to help thaw out hundreds of thousands of square miles of land. In both examples, China's response was effective, but its implementation lacked the same efficient resolve.

In the immediate aftermath of the earthquake, President Hu quickly and effectively directed government focus and resources to assist in the implementation of relief operations in Sichuan Province. Premier Wen's leadership was also instrumental in centralizing coordination efforts to ensure that citizens in the hardest hit areas were given top priority to receive water and food rations.¹⁰ The General Staff Headquarters of the PLA also immediately issued an instruction calling for the Chengdu Military Region, PLAAF, and Armed Police to respond to the disaster.¹¹ Similar processes were followed in the aftermath of the January 2008 snowstorms that paralyzed over 19 provinces and left hundreds of millions seeking to return home for the Lunar Spring stuck in the snow.¹²

The government's effective decisionmaking process displayed in both of these situations is likely to continue as central government emergency relief procedures become more refined and consolidated and as leaders seek to balance their political interests with the needs of their people. Preventing a rebellion similar to the Tiananmen uprising remains a major

driver for quick, high-level responses from the central government. The PLA has also carefully observed and internalized—as evident in the 2006 PRC Defense White Paper's description of disaster relief operations as the government “loving the people”¹³—how quick and effective response to disasters can generate positive public and international opinions of China.¹⁴ The centrality of effective and integrated information operation (IO) campaigns will thus remain a key part of disaster relief efforts. “Winning the hearts and minds” of disaffected citizens is a lesson the Chinese have learned from American-led tsunami relief operations in 2004. The leadership in Beijing will also continue to take steps to improve its international image as a receptive and responsible government. This will ensure that the central government efficiently responds to humanitarian disasters. China's IO campaign and censorship of stories critical of relief efforts have created a one-way stream of information that has in many ways colored over actual shortcomings.

What is becoming apparent is that advancement in decisionmaking processes in Beijing is not translating into effective response or enforcement in disaster relief operations. The central government's response to domestic disasters has not carried over into an effective physical demonstration of PLA capabilities. Actual PLA responses to the 2008 snowstorm were woefully inadequate, as Kent Ewing, professor at Hong Kong's International School, noted: “In the end, the central government committed 2.7 billion Yuan (US\$376 million) to disaster relief, but the lack of any effective disaster management plan was a glaring omission in central government planning.”¹⁵ This criticism is becoming prevalent again as relief workers in Sichuan continue to struggle to provide adequate support to millions of quake victims.

Beijing's efforts in the aftermath of the May 12 earthquake provide significant insight about the capabilities the PLA is likely to pool to deal with future disaster relief operations and potentially large-scale deployments requiring airlift assets and heavy equipment for ground transport. It is important to keep in mind that the earthquake relief effort has been the broadest deployment of PLA troops since the 1979 border war with Vietnam.

More than 140,000 military personnel have been mobilized in the aftermath of the Sichuan earthquake. These soldiers are “from all sectors of the military—from paratroopers to the strategic-missile divisions.”¹⁶ Such divergent composition highlights a lack of specialized

brigades or divisions capable of responding to particular hybrid contingencies, such as disaster relief, and more broadly to full-spectrum wars (for example, counterinsurgency campaigns and nationbuilding exercises).

The military has been instrumental in relief operations because many roads and bridges leading to the epicenter were destroyed, which inhibited mobility of heavy vehicles and rescue workers. Airlift capabilities have also been extremely important for the delivery of food, water, and critical relief personnel to the hardest hit and least accessible areas. However, despite laborious work by hundreds of thousands of Chinese workers and nongovernmental organizations, progress has been limited and anxiety in the region is increasing as relief assistance gains have slowed and the death toll continues to soar, now eclipsing 70,000.

Beijing's efforts in the aftermath of the earthquake provide insight about large-scale deployments requiring airlift assets and heavy equipment for ground transport

Although there has been progress in recovery operations, various news reports and private conversations reveal significant challenges that the PLA—and its antiquated ground capabilities—will continue to face in future disaster relief or even military operations. Many current failures are attributable to the Chinese perspective that the sheer mass of the workforce can supplant modern capabilities such as earthmoving equipment.¹⁷ Contrast this with national security writings that claim the PLA is undergoing a major revolution in military affairs (RMA) “to transform its military from an army based on Mao Zedong's principles of mass-oriented, infantry-heavy *People's War*, to what many foreign observers perceive to be an agile, high-technology force.”¹⁸ The relief efforts quickly exposed how far China's ground and air assets are from successfully modernizing and becoming the nimble forces necessary to effectively project power. Hong Kong-based military analyst Andrei Chang noted that

the relief mission had exposed weakness in the PLA. The force was struggling to carry out operations that would be standard during modern warfare. . . . The disaster areas are

like real battlefields. Good coordination, cooperation among different forces is necessary in today's battlefields. But the PLA just couldn't do it.

Airlift Capability Gaps

The Sichuan earthquake is a quintessential example of an airlift-dependent disaster relief operation. Roads, bridges, and tunnels were destroyed, limiting access to almost 40,000 square miles of earthquake-devastated lands. Despite President Hu directing Chinese resources to respond to the crisis, significant airlift capability gaps have hindered responses to relief operations, which require strong air-, land-, and seabased assets. Airpower is demonstrated not only by possession of air superiority fighters, but also by a full-spectrum composition of capabilities to respond to any challenge to a nation's security. Airlift is a critical element of a nation's ability to project power overseas, and China's shortcomings in this area highlight big gaps in its airpower. Many of the capabilities and assets required for large-scale disaster and humanitarian relief operations are also useful for direct action operations. For example, strategic airlift and force structures optimized to deal with postdisaster reconstruction have utility in counterinsurgency operations that focus on alleviating conditions that make radicalism more likely (such as poverty). In these operations, the center of gravity is not kinetic effects but meeting the needs of disenfranchised people. Strategic airlift is also useful in troop deployments for large-scale military operations, as evinced by over 60 years of aviation history from the Berlin airlift to the 2004 tsunami core group efforts. In contemporary terms, ferrying tens of thousands of soldiers into landlocked environments, such as Afghanistan, requires significant heavy lift and rotor lift capabilities.

Poor air relief efforts have exposed a significant crack in the PLAAF ability to respond to major challenges, both traditional and non-traditional. There are five main reasons for this shortfall: aging aircraft in limited supply, a relatively young and inefficient defense industrial base, lack of recognition within the PLAAF of the need to invest in equipment for peacetime operations, inadequately trained pilots,¹⁹ and lack of clarity between China's civilian and military leadership.

Aging and Limited Airlift Assets. A significant constraint for the PLA is the PLAAF's limited and aging strategic airlift capability, which is likely to constrain major

air-based operations in the future. During earthquake relief operations, the Chengdu Military Regional Air Force (CMRAF)—the smallest in terms of aircraft number and assets—was initially in charge of coordinating the air-based relief campaign. Its aviation element consists of two fighter divisions and one airlift division.²⁰ Formed in 2005, the 4th Airlift is woefully underequipped: it has a few Mi-17V7 helicopters for search and rescue missions, and its proposed upgrade of Il-76MD transport planes and Il-78 aerial tankers has been seriously delayed by Russia, the maker of these platforms.²¹ The CMRAF is in charge of the defense of Sichuan Province and is the first responder to such crises as the 2008 earthquake. Unfortunately, its inadequate capabilities severely undermined initial transport-dependent relief operations. The CMRAF is just a microcosm of poor PLAAF heavy-lift capabilities.

Chinese military expert Dai Xu noted that “looking at the PLA's equipment and rapid response capabilities from the perspective of modern warfare, there is still a great gap between the PLA and advanced militaries.”²² A lack of capable airlift also complicated the efforts of relief workers, who arrived via train and commercial flights to Chengdu.²³ In many instances, these workers were forced to hike through harsh terrain, leaving many in poor shape to assist when they reached the quake-ravaged villages.²⁴

diversion of airlift platforms from all over the country indicates that the PLAAF's ambitious growth plan is far from being accomplished

According to Dennis Blasko, former U.S. Army Attaché at the U.S. Embassy in Beijing, “Because the military did not have heavy-lift helicopters, vital equipment like excavators and cranes had to be brought in on roads obstructed by landslides, slowing the pace of the rescue operations.”²⁵ Even though the Chinese deployed air assets, the fleet was limited and was therefore forced to pool civilian assets for relief operations. Assets were diverted from PLA Navy air wings to provide environmental reconnaissance assistance to address damage in regions that were too difficult to navigate by land. More than 100 MiG-17 and Black Hawk helicopters were dispatched from every national military region, and China's Y-8 transport planes provided important assistance to devastated areas.²⁶ Diversion of airlift platforms from all over the country indicates that the PLAAF's rather ambitious growth plan is far

from being accomplished or balanced to meet future strategic needs.

The PLA's limited airlift capabilities were enhanced in this case by foreign assistance. The decision to accept international support was a major shift in posture. Prior to the earthquake, the PLA was hesitant to accept external help, but afterward allowed U.S. Pacific Command to send two C-17 Globemaster III transport planes to Chengdu—delivering upward of 200,000 pounds of disaster relief supplies.²⁷ Russia dispatched 15 Il-76 military-use transport planes to deliver some 350 tons of humanitarian aid. A Russian MiG-26 heavy-duty transport helicopter is assisting China's only MiG-26 in transporting heavy digging machines to the Tangjashan quake-lake.²⁸ Pakistan sent two C-130 transport planes, while South Korea and Taiwan also contributed disaster relief assistance. Even corporate donors provided airlift. For example, Federal Express furnished critical heavy lift for ferrying humanitarian supplies to disaster-stricken areas.²⁹ Furthermore, Beijing's decision to temporarily divert some Air China resources to ensure the transportation of PLA soldiers and resources to Chengdu was vital.³⁰

Defense Industrial Base. Compounding the PLA's limited airlift capability is a relatively weak indigenous development program for transport planes. The PLAAF's main strategic transport aircraft, the Il-76, which was used in early responders' efforts to deliver relief sup-

plies and personnel to the epicenter, is manufactured in Russia. The Y-8 is a Soviet-era, Ukrainian-designed plane with an airframe built in the 1960s; however, recent avionics and engine upgrades have enhanced the once handicapped plane.³¹ The MiG-17 and the MiG-26 transport helicopter with its remote-sensing technology are also built in Russia. Meanwhile, the first helicopter to land in Wenchuan was a U.S.-made S-70 Black Hawk. Ultimately, Chinese disaster relief efforts were hindered by a lack of capable heavy- and rotor-lift capabilities. Reliance on foreign airlift assets to bridge PLA shortcomings is not a comfortable path for PLA authorities, but it highlights a major gap in their capabilities.

The Chinese helicopter industry is one of the nation's weakest sectors. The earthquake relief operations highlighted that additional

and improved helicopters will be necessary to respond to future contingencies, which will likely pose tremendous strain on the national economy and government as well as on state security. China is in the process of procuring and producing more helicopters, such as the Mi-171 (transport airlift),³² and its Aviation Industry Corporation II is also in a multiyear plan to resuscitate Chinese transport-lift capacity.³³ However, without a greater investment in domestic production of transport planes, it is unlikely that the existing airlift fleet will be able to handle future large-scale relief operations. A lack of sufficient open-source evidence on procurement of rotor- and heavy-lift assets is a major constraint in analyzing the effectiveness of Chinese responses to future contingencies, but major changes in PLAAF doctrine indicate that aviation platform procurement trends are tilting toward so-called next-generation platforms.³⁴

Shift in PLAAF Doctrine. The 10th Communist Party of China Congress made a major announcement in 2004, branding the PLAAF a “strategic air-force.” This move not only embraced the development of a more futuristic and independent air force service culture, but also forced a major reorientation in aviation platform acquisition priorities. A more independent service culture has given the PLAAF political space to focus on a large-scale buildup of long-range assets designed to achieve air superiority and dominance.³⁵ This trend is reflected in the 2008 edition of the annual Pentagon report on China’s assessment of PLAAF assets and procurement trends.³⁶ Dai Xu believes the Chinese army has the experience to establish an aviation force. The questions are how to “aviationalise” the army based on this experience and whether there is sufficient support for such a transformation.³⁷ The latter issue remains a major concern that is perhaps intractable given the PLAAF’s doctrinal shift.

Efforts to modernize and acquire fourth- and fifth-generation air superiority fighters continue to occupy budgetary resources, leaving PLA efforts to rebalance and modernize its existing forces on a relatively poor foundation. Competition for resources has in recent years created a perception that nontraditional security operations—such as peacekeeping and humanitarian-based relief initiatives—compromise efforts to deal with larger traditional security challenges—particularly, a cross-straits contingency.³⁸ Focus on next-generation platforms, a major element of the PLA RMA program, provides some indication of where

China anticipates strategic challenges and also offers a potential explanation for its aging and limited heavy-lift capability. It is unknown whether the earthquake relief operations have sufficiently demonstrated that the PLAAF should recapitalize its existing heavy-lift fleet or else invest in new strategic lift platforms.

Inadequate Training. The lack of a rigorous training regimen will likely undermine future disaster relief campaigns. According to one Shanghai-based expert, “[b]ecause of an insufficient budget, many pilots can only fly once a year. . . . The mountainous terrain in Sichuan made an air-drop operation very difficult. Inexperienced pilots dared not fly too low.

That is why they had to drop material from higher up, and that explains why the landings were not accurate.”³⁹ For example, during the immediate aftermath of the quake, poorly trained pilots tried and failed twice in landing a helicopter in the ravaged epicenter.⁴⁰ Airlift

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Chinese military vehicle moves humanitarian relief supplies



U.S. Air Force (Chris Vaccaro)

operations require constant preparedness and acclimatizing to conditions that necessitate thorough and regular training exercises. Failure of the PLAAF to allocate resources to meet these needs will undermine not only disaster relief operations but also combined arms campaigns that require joint land and air assets. A lack of joint training further highlights significant failures in the PLA ability to implement its modular force restructuring plan, which places greater value on interservice cooperation from the division to battalion level. If the PLA is to be faced with contingencies that require operational assistance from both the PLA and PLAAF, reconciliation of operational roles and command must be given greater priority.

Civil-Military Relations. Compounding interservice rivalry is the lack of balance between the civilian leadership and the PLA—a balance vital in mediating interservice disputes and ensuring joint service cooperation. According to David Shambaugh, “Since the mid 1990s, there has been an evident, if subterranean, three-way struggle being played out among the army, party, and government—with the army seeking greater autonomy. . . . No radical restricting of party-army relations has been undertaken.”⁴¹ Absent the development of service cultures that are able to coexist under the mantle of civilian leadership, the likely direction of PLA efforts will remain largely divergent from the CCP’s proscriptions.

Effective civilian control is important to ensure that the slew of disaster relief laws promulgated by the Standing Committee over the

past decade is implemented in PLA operations. The number of laws on the book pertaining to disaster relief operations will ring hollow if the Central Military Commission is not able to mediate interservice disputes. Strong civilian control may not have enhanced China’s disaster relief effort, but it would have provided greater continuity in the implementation of the Standing Committee’s relief policies. In terms of future large-scale operations, failure to mediate civil-military disputes could endanger the continuity that militaries require to efficiently execute and achieve their stated objectives.

Ground-based Relief Efforts

For over three decades, the PLA’s central focus has been preparation for a possible Taiwan contingency. Shaping the military to deal with disaster relief operations as a core competency will meet with tremendous opposition from PLA leaders, who perceive non-Taiwan operations as trading off with preparedness for a cross-straits operation, particu-

mobilizing a hundred thousand soldiers to manually dig trenches rather than spending millions on earthmoving equipment is a gamble the PLA and the government seemed comfortable taking

larly if missions involve foreign deployments. Leaving soldiers ill equipped and undertrained will generate further challenges.

PLA efforts in the Sichuan earthquake were overwhelmed in many ways by the devastated roads and ground-based access routes. Moreover, earthmoving equipment and heavy vehicles for transport of debris were inadequate because of the sheer magnitude of the disaster.⁴² The government made public requests for donations of rescue equipment, rubber boats, demolition tools, shovels, and cranes. With over 4 million homes demolished and roads and bridges destroyed, the PLA has been unable to match its assets to the enormity of the problem. Even after heavy earthmoving equipment was made available, destroyed roads prohibited entry into disaster zones. As dams began to show signs of fatigue, concerns grew about getting construction equipment on site to fortify the structures. PLA and civil authorities went so far as to solicit assistance from Caterpillar, which specializes in the manufacture of heavy vehicles and earthmoving equipment.

Land-based efforts, perhaps more than airlift shortcomings, highlight Chinese perceptions of the value of mass manual labor over modern equipment such as bulldozers. Reports of soldiers forming human chains and digging trenches and water diversion routes with shovels indicate both a lack of high-tech resources and a friction against implementation of RMA processes. This is in sharp contrast to reports that the “PLA is committed to hardening the army with both tracked and wheeled armored vehicles.”⁴³ James Mulvenon, a specialist on the Chinese military at the Center for Intelligence Research and Analysis, argues that although troops were mobilized, they were basically “a bunch of guys humping through the mountains on foot and digging out people with their hands . . . it was not a stellar example of a modern military.”⁴⁴

Mobilizing a hundred thousand soldiers to manually dig trenches, move rubble, and support dams rather than spending millions on earthmoving equipment is a gamble the PLA and the Chinese government seemed comfortable taking. Balancing the needs of the RMA process with procurement of more traditional heavy-lift equipment is a challenge that the army seems to have overlooked. Whether it commits resources to replenish and modernize these assets remains an undecided but logical course of action given the deficiencies identified during the relief operations.



PLA soldiers construct temporary housing for earthquake survivors, May 2008

UN Photo (Evan Schneider)

As China becomes further dependent on foreign sources of energy, it will find itself vulnerable to security threats that require more than sheer military force. Its ability to secure key pipelines in insurgent strongholds in West Africa, Baluchistan, and Southeast Asia will pose tremendous security risks and will require a force structure that is mobile and capable of responding to unconventional challenges. More than anything, the Iraq War has impressed upon the intelligentsia that even China is not immune to terrorist threats. Adapting the force structure to deal with such challenges should be a top priority, but as demonstrated by the PLA's relief efforts, it currently is not. The most capable ground forces are able to conduct both kinetic and nonkinetic operations. Mechanics, engineers, systems planners, and language specialists are vital to reconstructing war-torn insurgent strongholds and ensuring security and stability. The earthquake relief efforts demonstrated a rather monochromatic and antiquated Chinese force structure.

There is a silver lining to China's relief efforts. Regardless of major shortcomings, the People's Liberation Army has been able to identify capability gaps that should be addressed—and successful units that should be expanded—to enhance its capacity to deal with the growing threat of natural disasters.

This article does not argue that China has failed in its earthquake response—on the contrary, it identifies successes in the decision-making process. However, the relief operations revealed many deficiencies in the PLA ability to implement and execute the Standing Committee's edicts. It is hard to draw direct operational lessons from these shortcomings, but absent greater investment in strategic airlift, the PLA is likely to be constrained on a number of fronts, both during peacetime and in response to security challenges that require the transport of troops outside of the mainland.

The government response to the earthquake has highlighted many interesting capacities of both the PLA and Chinese Communist Party bureaucracy. In the immediate aftermath of the earthquake, the central government effectively and efficiently passed national emergency measures and directed all necessary resources to devastated regions. This response highlighted a more efficient bureaucratic process that seemed to internalize many laws from decades past governing disaster relief and emergency powers. On the other hand, the implementation and execution

of the relief operations were relatively slow and unorganized. The PLA and its component branches lacked the platforms and capabilities to execute the Standing Committee's orders. The magnitude of the earthquake also demonstrated the challenges that the PLA is unable to deal with and that will prove particularly useful in determining its ability to respond to future military-led campaigns, whether humanitarian or warlike in nature. For the foreseeable future, procurement priorities will likely trend toward a more robust RMA-driven agenda, leaving many of the capability gaps identified in this article unaddressed. **JFQ**

NOTES

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