Three Dates, Three Windows, and All of DOTMLPF-P

How the People’s Liberation Army Poses an All-of-Army Challenge

Ian M. Sullivan
Starting in 2015, China’s People’s Liberation Army (PLA) embarked upon the most ambitious, extensive, and far-reaching reform and modernization program in its history. This effort was intended to radically transform the PLA from a large, bloated force focused largely on territorial defense into a highly modern military capable of securing the Chinese Communist Party’s (CCP) security objectives internally, within the region, and across the global commons. This effort would require a whole new PLA, capable of, in the words of General Secretary Xi Jinping, fighting and winning a modern, joint, multidomain war against what the CCP terms “the strong enemy”—a euphemism for the United States. Much of the attention on this effort has focused on the rapid development of capabilities that China has produced and even integrated into the PLA. The progress has been stunning and demonstrates a true technological challenge to a U.S. joint force that has been accustomed to enjoying a significant edge in capabilities over its adversaries dating back to the Cold War. Many observers look to China’s modernization efforts and see a dizzying array of new systems and capabilities coming online within the PLA and focus on them as the problem that our modernization must solve.

Focusing only on the capabilities the PLA is developing, however, misses the point of what the CCP and PLA are trying to accomplish with this modernization. It is about more than materiel. It is instead about creating an armed capability to defeat the strong enemy regionally and eventually globally. China’s military modernization covers every part of what the U.S. military calls DOTMLPF-P (doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy). It specifically is trying to overcome its own shortfalls enshrined in the mid-2010s catchphrases as “the two inabilities,” “the two big gaps,” and the “five incapables,” which nicely capture the overall intent of this effort. The CCP and PLA understood that they needed a rapid influx of new capabilities, but at their core, these internal critiques get after the ability of the PLA as an institution, and especially through the abilities of its leaders to fight and win a modern war against its potential adversaries. It is not designed for mere technological overmatch. It is instead designed to challenge the U.S. Army and joint force across the three areas that have underpinned U.S. military dominance in the post-Desert Storm period: dominance in materiel, dominance in soldiers and leaders, and dominance in approach to warfare.

### Three Dates

The PLA modernization challenge does not exist in a vacuum. It is part of a broader plan by the CCP to create “the great rejuvenation of the Chinese nation” by 2049, which is the centennial of the foundation of the People’s Republic of China. It is part of a broad party-led effort to secure for China “a leading place” in the world. To get there, the party will work to generate and employ all elements of national power to defend its sovereignty, maintain internal stability, and protect its growing interests regionally and globally to allow for its economic development. China has been engaged in a broad, whole-of-nation effort to achieve these goals, including such efforts as the Belt and Road Initiative, its “three warfares” construct for great-power competition, leadership in international organizations, and a renewed focus on diplomacy (its role in BRICS [a Brazil, Russia, India, China, South Africa alliance], its work to restore relations between Saudi Arabia and Iran, and even its political engagement to resolve the Russia-Ukraine War). But it is a modernized PLA capable of asserting itself both regionally and globally that is a

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necessary backbone to this entire revitalization of a CCP-led Chinese state.

CCP leadership has not been shy in talking about PLA military modernization, particularly in terms of laying out its ambitious timelines. Initially, there were two dates that mattered—2035 and 2049—but a third, 2027, has recently come to the forefront in terms of where China is going. These dates need to be addressed in reverse order, starting with 2049.

2049. The year 2049 is a big one for Beijing and the CCP, as discussed above. But it has more concrete meaning for the PLA, too. The 19th Party Congress, which was held in October 2017, presented both the rationale and the objective of the PLA’s military modernization program. It is intended to create a force that is inextricably linked to the CCP that can manage crises, deter its adversaries, and win wars. It also notes that the overall intent of the program is to transform the PLA by 2049 into a “world-class” military. While not specifically defined, this very likely means developing a military that is at least equivalent to the United States and some of its Western partners. In terms of capabilities, the PLA of 2049 should be expected to be able to deploy forces across all domains globally to protect Chinese interests.

2035. If a world-class military is the goal by 2049, a waypoint on the journey is 2035, where the PLA will complete its initial transformation into an “intelligentized” force. First making its appearance in China’s landmark 2019 defense white paper, “China’s National Defense in the New Era,” the term intelligentized warfare offers something of a transition from its previous “local wars under informationized conditions.” The white paper notes that “war is evolving in form towards informationized warfare, and intelligentized warfare is on the horizon.” Subsequent Chinese defense writing has demonstrated deeper meaning, noting that the object of intelligentized warfare is to directly control the enemy’s will. In practice, this would mean integrating new technologies, like artificial intelligence, machine learning, and quantum computing into the PLA’s command, control, communications, computers, cyber, intelligence, surveillance, and reconnaissance; its weapons systems; and throughout the military decision-making process. It also
means completing critical modernization efforts across DOTMLPF-P so that the PLA is capable of fighting and winning against its strong enemy. The PLA’s plan is to be fully intelligentized by 2035.

2027. Keeping in mind Mike Tyson’s dictum on strategy, it was Xi himself who provided this plan with the proverbial punch in the mouth by offering a third date of relevance: 2027. The relevance of 2027—the centennial of the founding of the PLA—came to the forefront of the seminal 20th Party Congress, which occurred in October 2022. The 20th Party Congress represented not only the codification of Xi’s authority, arguably making him the most powerful and relevant Chinese leader since Mao, but also a demonstration of a shift in thinking in terms of China’s security situation. It specifically referenced “drastic changes in the international landscape,” which was a departure from the 19th Party Congress’s focus on economic development and stability. The military ramifications of the 20th Party Congress demonstrate a sense of urgency on the part of the CCP that is rarely seen. It called for speeding up the modernization effort across the board. It instructed the PLA to regularly deploy its forces, establish a strong deterrent, increase “new domain forces” (cyber and space), increase the use of unmanned systems, and rapidly complete its modernization effort. The 2027 date could be seen as a new modernization benchmark, potentially replacing 2035 as a target.

This newfound sense of urgency to speed up modernization took on new meaning with statements from U.S. officials on what it could mean. CIA Director William Burns publicly affirmed that the United States knew “as a matter of intelligence” that Xi has ordered the PLA to be ready by 2027 to conduct an invasion of Taiwan to complete Beijing’s long-standing ambition of reunification. Burns goes on to say that this does not mean that Xi has decided to go war with Taiwan in 2027, but that it stands as a “reminder of the seriousness of his focus and ambition.” Then chairman of the Joint Chiefs of Staff Gen. Mark Milley also indicated that the PLA has been told to prepare for 2027, but that Xi likely has not made a decision to go to war. He added, however, that some Chinese political and military leaders may have concluded that war with the United States is inevitable. Whether or not Xi has decided, his sense of urgency on military modernization has real-world implications for the U.S. Army and the joint force.

Three Windows

The three dates create three windows of vulnerability for the Army and the joint force. The first is a “fight tonight” reality, where regional tensions could boil over, an accidental close approach of a PLA asset to U.S. or allied forces could lead to an exchange of fire, or some third-party action could lead to a rapid conflict between China and the United States. This period runs from the present out two years to 2025. The second is a “fight in the near-term” window, starting in 2025 and ending in 2030. It is a period focused on Xi’s new 2027 proclamation of being ready to fight in Taiwan. It also is a particularly dangerous period for the U.S. Army, as a fight occurring before 2030 will be inside the Army’s key modernization benchmark of delivering the Army of 2030. In such a scenario, China’s modernization program and drive to intelligentization would be ahead of the Army’s and the joint force’s drive to Joint All-Domain Command and Control, which is the Department of Defense’s new vision and approach to identifying, organizing, and delivering improve joint force command and control capabilities that account for the modernization efforts of peer competitors like China. Finally, the threat window after 2030—the “fight in the future”—would see a modernized U.S. Army capable of waging
multidomain operations with its own 2030 modernization benchmark complete. It would also be a time where the PLA and the U.S. Army (and the joint force) are locked in a continuous struggle to garner material advantage through China’s 2049 benchmark.

The “fight tonight” window is dominated by current events. Tensions between China and the United States have been increasing for some time, but they have intensified since Congresswoman Nancy Pelosi’s visit to Taiwan in August 2022. Likely viewing it through the lens of continual U.S. interference in China’s rise, Beijing expressed extreme displeasure with the visit. Chinese Foreign Minister Wang Yi called the United States the “biggest destroyer of peace across the Taiwan Strait and for regional stability,” and added “China will definitely take all necessary measures to resolutely safeguard its sovereignty and territorial integrity in response to the [then] U.S. Speaker’s visit.”19 In the days following the visit, the PLA’s Eastern Theater Command stepped up ongoing exercises to include the deployment of more than two hundred aircraft and fifty warships in and around Taiwan.20 They also fired eleven ballistic missiles off Taiwan’s northeast and southwest coasts.21 In the year that followed Pelosi’s visit, PLAAF aircraft conducted hundreds of violations of Taiwanese airspace, including more than 140 across the Taiwan Strait centerline involving about one thousand aircraft. Between 2020 and the visit in 2022, although the PLAAF violated Taiwanese airspace frequently, there were only two instances of centerline violations.22 Between April and September, the PLA has conducted a series of exercises involving elements of all its services off Taiwan.

China has not limited its activities to exercises off Taiwan. There have been several highly dangerous “close encounters” between PLAN and U.S. warships, as well as unprofessional intercepts of U.S. aircraft in international waters and airspace. The most dramatic encounter was between a PLAN Luyang-III-class guided missile destroyer and the USS Chung-Hoon, an Arleigh Burke-class destroyer, in which the Chinese destroyer closed to within 150 yards and forced Chung-Hoon to

Soldiers of the “hard-boned Sixth Company” of the People’s Liberation Army 74th Army Group participate in a battle drill in a coastal area of Guangdong Province, China, on 1 June 2020. (Photo courtesy of Xinhua)
veer away. Just days before, a PLAAF J-16 fighter flew directly in front of the nose of a U.S. Air Force RC-135 Rivet Joint reconnaissance aircraft flying in international airspace over the South China Sea, forcing the U.S. aircraft to fly through dangerous turbulence.

Finally, China’s ambitions in the South China Sea have led to a very dangerous situation in which the Chinese Coast Guard and Maritime Militia have worked to thwart efforts by the Philippines to resupply its outpost—a rusted, grounded ship—in the Second Thomas Shoal in the disputed Spratly Islands. Although well within Manilla’s exclusive economic zone, China claims the Second Thomas Shoal, and its Coast Guard and Maritime Militia have worked to deny three efforts by the Philippine Coast Guard to resupply the beleaguered station. Chinese actions have included dangerous close encounters and even the use of water cannon against Philippine resupply ships.

Taken together, these actions demonstrate increased PLA activity in the region aimed at Taiwan, the United States, and its allies and partners that could potentially spiral and create an armed escalation leading to a conflict. These types of activities are examples of broader Chinese efforts across the region that could lead to a crisis, and even conflict, if not managed carefully. It demonstrates how quickly the “fight tonight” threat window could ignite.

The “fight in the near-term” window is a bit more complex but revolves around Xi’s shift to 2027 as the date for the PLA to complete parts of modernization and to be ready for Taiwan. Despite his wishes, it is unlikely that the PLA will fully and completely implement its modernization efforts within the next four years. It will, however, complete significant pieces of it, and when taken together with what it already has achieved, could create a near-term advantage for the PLA in terms of modernization over the U.S. Army, whose own modernization efforts do not completely crystalize until 2030. The newly salient 2027 waypoint between the already completed 2020 goal of “informationized warfare” and “mechanization” and the 2035 “intelligentization” becomes critical, particularly when
taken with Xi’s guidance to the PLA to be ready to take Taiwan by the same year.

The focus of 2027 would not necessarily be on new capabilities—though new systems will continue to roll out and deploy across the PLA between now and 2030—but instead will be on force structure reforms and professionalization, which are critical if the PLA is to become a force capable of waging intelligentized warfare. It will, however, take advantage of new systems that already have come online, and what has come online thus far has been impressive. The PLA army by 2022 has revamped its formations, and now 70 percent of its main battle tanks can be considered “modern,” while 60 percent of its heavy and medium combined arms brigades are now equipped with modern tracked or wheeled infantry fighting vehicles. The PLAN is now the world’s largest navy, and its rapid deployment of new warships means its fleet is largely modern and capable. As of 2023, it fields 340 ships in its battle force (and another 85 missile-armed patrol combatants). By 2025 this number will surge to 395 and will then increase again to 435 by 2030. The PLAAF has standardized its fighter force around three aircraft—the J-10, the J-16, and the fifth-generation J-20. It now fields over six hundred aircraft in nineteen brigades and has doubled the production of the J-10 and J-16 over the last three years. More than 150 J-20s are now in service. They have fielded new capable air-to-air missiles like the PL-15 and PL-16, and increased the fielding of Y-20 transport aircraft, which are similar in function to the U.S. C-17. The PLA Rocket Force (PLARF) has seen a variety of new systems come on line, including the DF-21 (which includes an antiship variant designed to target U.S. aircraft carriers), the DF-26 (known as the “Guam Killer”), the DF-17 hypersonic missile, and two new intercontinental ballistic missiles—the DF-31 and DF-41. The PLARF also is expanding its nuclear arsenal, which is expected to have seven hundred warheads by 2027 and one thousand by 2030. This even includes a fractional orbital bombardment system capability that was revealed in 2021.

As noted, however, the 2027 threat window is about more than materiel. It is about people, readiness, and organizational change. In terms of people, China is working to modernize its approach. Beijing’s 2019 defense white paper stated that “military training in real combat conditions across the armed forces is in
The PLA has been working to improve its training and professional military education (PME) since the mid-1980s, but never with the focus and intensity that we have seen with this current 2017 modernization effort.
pool of conscripts who completed their two years of service and then volunteered to extend their time in the military. These personnel generally gravitate to the management NCO. The second involves the recruitment of an “NCO-cadet” who is recruited directly from high school due to technical aptitude. They receive three years of training; two-and-one-half years of technical training and then half a year of military field training before serving another three years as an NCO, generally in a technical area. The third is a direct recruit NCO who is a civilian with a bachelor’s degree who joins immediately as a corporal. For the latter two types of NCOs, the PLA is looking largely for individuals with engineering, information technology, and data science experience.37

But there are still key obstacles that that PLA must overcome here; the most significant is a lack of experience and the general lack of quality training and education systems for the NCO corps. While this certainly creates an institutional weakness, the PLA’s general approach to system-of-systems warfare may be less reliant on high-quality NCOs, namely because it is focused heavily on the use of long-range fires to target the systems that allow its adversaries’ military mechanism to function.38 However, the steps that the PLA has taken thus far have put it on the path to creating a more effective NCO, particularly in terms of technical expertise.39

When taken as a whole, the “fight in the near-term” window creates a significant challenge for the U.S. joint force. It may represent the most dangerous of the three windows in which our potential adversary’s modernization effort is inside of our own, they will have made progress on their journey toward intelligentized warfare, and they will start to see an improved form of human capital in the ranks of the PLA, although certainly not yet on par with the United States or its key allies. It is in this window where the human dimension will be the U.S. Army and joint force’s critical advantage, and it is imperative that we maintain this edge and prepare this force through focused training and PME.

The third threat window is “fight in the future.” This admittedly is the most difficult to understand, as it focuses on that critical area between 2030 and 2050. If China’s plans hold, it is when the PLA becomes the world’s leading military and China itself enjoys its broad national rejuvenation. In this phase, the PLA will more fully integrate and develop advanced technologies to multiply its combat capabilities and to effectively collapse an adversary’s ability to wage warfare by targeting the reinforcing systems—command and control; fires; intelligence, surveillance, and reconnaissance; and logistics. The technologies that China will develop and the PLA will employ in this window will create a synergistic effect that the PLA describes as “1 + 1 > 2.”40 We have already discussed intelligentized warfare, but in this threat window, we see the threat transforming into a broad strategic struggle between the United States and its allies and China to harness advanced technologies, particularly those related to artificial intelligence, which China increasingly sees as the true focus of future great power competition. The 2019 defense white paper stated, “International military competition is undergoing historic changes. New and high-tech military technologies based on IT are developing rapidly. There is a prevailing trend to develop long-range precision, intelligence, stealthy,
or unmanned weaponry and equipment.\textsuperscript{41} When combined with the system-of-systems warfare concept that underpins Chinese military thinking, it is easy to understand the gravity of this threat.

**A Way Ahead**

The United States is not defenseless here. The Army of 2030 will receive an influx of new equipment and capabilities designed to conduct multidomain operations, while the joint force will implement Joint All-Domain Command and Control—enabling faster decision-making and dramatically increasing the pace and scale of U.S. joint operations. Additionally, Army Futures Command is already working on a new operating concept for 2040 that will consider dramatic changes in technology and introduce new DOTMLPF-P capabilities designed to prevail on a battlefield where the adversary is waging intelligentized warfare.\textsuperscript{42}

The technological competition between the United States and China will represent a strategic threat to the Nation, and the “fight in the future” window will require the Army and the joint force to establish solutions across DOTMLPF-P if we are to stay ahead of PLA. While there certainly are challenges to overcome, the Army is off to a good start. The establishment of multidomain operations as new Army doctrine in Field Manual 3-0, Operations, provides a strong foundation.\textsuperscript{43} New equipment is on the way. New organizations are joining the force, like the security force assistance brigades and the multidomain task forces. Changes to training and leader development are ongoing, including a renewed focus on the China threat within Training and Doctrine Command schools. The Army War College is establishing a new China Studies program. Training within the Army is focusing on large-scale combat operations and the Indo-Pacific threat, which even includes the establishment of the new Joint Pacific Multinational Readiness Center in Hawaii and Alaska. There is new thinking and whole campaigns of learning focusing on this threat. For example, Maj. Gen. J. B. Vowell and Maj. Kevin Joyce wrote on the forward-deployed U.S. Army Pacific (USARPAC) as a “contact layer” designed to survive an initial strike in the Indo-Pacific and then fracture the enemy’s antiaccess/area denial network.\textsuperscript{44} Furthermore, USARPAC’s Operation Pathways—which includes more than forty joint exercises across the Indo-Pacific theater—demonstrates readiness and commitment to the region and keeps combat-credible Army forces forward on a near-constant basis serving as a critical deterrent to Beijing’s potential ambitions.\textsuperscript{45} Additionally, the Unified Pacific wargame series serves as a rigorous strategic and operational wargame to derive insights into USARPAC’s contribution to joint warfighting in the Indo-Pacific theater.\textsuperscript{46} These activities taken together demonstrate a whole-of-Army response to the challenge posed by the PLA.

The PLA’s modernization effort represents a significant challenge to the Army and joint force of a type that is rarely seen; a true peer threat that manifests across time and across DOTMLPF. Beijing and the CCP’s focus on the three dates of 2027, 2035, and 2049 roll out three critical threat windows that require an answer across DOTMLPF-P to solve. For the Army, it represents a threat to the fielded, forward-deployed force in the Indo-Pacific but also to the institutional side of the Army. Each of the Army’s institutional commands—Forces Command, Materiel Command, Training and Doctrine Command, and Futures Command—has a role to play in countering the People’s Liberation Army’s modernization efforts. (Composite graphic by TRADOC G-2)
relevance, but the nature of the threat, the advent of new technologies, a more complex operational environment (at home and abroad), and the changing character of warfare will require a concerted effort, renewed commitment, and broad collaboration within the Army and the joint force, and with our allies and partners to solve.

Notes


6. Ibid., 32–33.


9. Ibid.


16. Ibid.


usindopacom-statement-on-unprofessional-intercept-of-us-air-craft-over-south-chi/.


27. Ibid.


33. Ibid.

34. Ibid.


36. Ibid.


39. Tetreau, “The PLA’s Weak Backbone.”


Army University Press Films
