POSS
PERIODICALS OF SOCIAL SCIENCES

Periodicals of Social Sciences
ISSN 2790-8720, eISSN 2790-8739
Volume 4, Issue 2, July- December, 2024

Chinese Military Reforms in a Post-Reform Military Environment: Analysis of Effects and Consequences on Amphibious Brigades of the PLA Army and Marine Corps

[1] Haider Hasan Tiwana & [2]Muhammad Haroon Khalid

Received: June 2024 *Revised: September 2024* *Accepted: November 2024* *Published: December 2024*

Abstract

The report was produced in the aftermath of a potential Chinese invasion of Taiwan. It implies that the People's Liberation Army (PLA forthwith)'s success is dependent on the strength and size of its amphibious troops, following 2017 revisions to PLA organizations at the corps and lower levels that have made the distinction between amphibious units of the PLA Army (PLAA forthwith) and PLA Navy Marine Corps (PLANMC forthwith) more apparent. This argument is developed over four major portions of this work. The first section discusses the 2017 force-wide reorganization and how PLAA and PLANMC amphibious units were reformed. The potential roles that the PLA's amphibious forces may play in an island-landing operation in Taiwan are described in the second part. The third describes the increased breadth and complexity of PLA amphibious unit training and exercises in the wake of the 2017 reform. The fourth segment sheds light on the possible difficulties that the Chinese invasion of Taiwan restructuring may present for PLA amphibious units when conducting landing operations. The paper concludes that the reorganization transformed the PLAA's present amphibious divisions into more modular combined arms brigades, resulting in the enhanced capacity of the PLA agencies to carry out distinct tasks in the future. It seems that PLANMC amphibious brigades are being shaped into possible first-responders to various types of situations in Asia, yet PLAA amphibious brigades have become quite specialized: a Taiwan landing operation. However, the PLAA force might not accurately represent future Chinese amphibious operations.

Keywords: Military reforms; amphibious brigade; PLAA; PLAMC; military environment.

1. Introduction

Though there has been much conjecture over a possible Chinese invasion of Taiwan, the success of the PLA ultimately rests on the strength and size of its amphibious troops. The 2017 adjustments to PLA organisations at the corps and below levels have made the distinction between amphibious units of the PLAA and PLANMC clearer. The reorganization of two PLAA amphibious mechanised infantry divisions and one amphibious armour brigade into six amphibious combined arms brigades (Kamphausen et al., 2012) reflects a newly found interest in Taiwan, and the basis of the actual war-fighting capabilities, even though the extended and more expeditionary-oriented PLANMC has become a subject of much analytical interest. Although both services currently have six landing-capable brigades, the PLAA and PLA Navy (PLAN henceforth) vary in terms of

1. Research Scholar, Bahria University, Islamabad Campus, Pakistan. Email: mhaiderhasan@gmail.com
2. Research Scholar, Allama Iqbal Open University Pakistan. Email: haroonjutt08@gmail.com

how they prepare to carry out landing operations in the future, and the variations in terms of organisation, structure of command, equipment, and training.

The PLA possesses twelve brigades that are prepared to carry out amphibious operations in a coordinated island landing mission against Taiwan (OSD, 2020). In contrast, the six amphibious brigades of the PLAA have significantly more amphibious heavy combined arms battalions (Ping, 2020) than the PLANMC. This discrepancy, rather than signifying a deficiency in PLANMC combat capability, shows the force's capacity to protect Chinese interests abroad in a variety of settings outside the Taiwan Strait. As part of a shift from amphibious to multifunctional brigades, the PLANMC acquired lighter and more mobile battalions to facilitate such planned operations (Guoquan & Haoyu, 2020).

The PLAA, on the other hand, continues to concentrate on cross-strait activities. The 24 PLAA amphibious combined arms battalions now have nearly as much combat support capability per battalion as their mechanised infantry regiment predecessors, thanks to the 2017 changes that shifted adequate combat power down to them. The six PLAA amphibious brigades are similarly equipped, entirely standardized, and designed to conduct opposed landings on a smaller scale using the division-regiment concept. As a result, the transition from division regiment to brigade-battalion structure involves more operational and tactical changes than strategic campaign-level ones. The PLA claims that the shortened chain of command gives lower-level commanders greater freedom and initiative to carry out landing operations (Xuhang et al., 2019; Ping, 2020). But because of their size and weight, the PLAA amphibious brigades need heavy equipment and appropriate naval transport, both of which are currently in short supply, as well as strong but unproven logistical capabilities. The PLAA amphibious brigades are only effective as a deterrent if there is insufficient PLAN medium and heavy lift. However, China may still exert influence over Taiwan and other regional competitors by publicising the amphibious brigades' training operations and pace.

These arguments are developed in four key sections of this study. The first talks about the 2017 force-wide reform and how PLAA and PLANMC amphibious units were reorganised. The second chapter describes the potential duties of PLA's amphibious units in an island-landing operation in Taiwan. The third describes the increased breadth and complexity of PLA amphibious unit training and exercises in the wake of the 2017 reform. The fourth segment sheds light on the possible difficulties that the restructure may present for PLA amphibious units when conducting landing operations. They all rely on official sources of the PLA media, military manuals, and journal articles, which allow them to fully understand the system and force capabilities.

2. Restructuring of the PLANMC Brigade and the PLAA

The necessity of the powerful amphibious forces is not new to the PLA, as decades of successful and failed invasions of islands have taught them that. PLA was also ready to conduct cooperative landing operations in fairly favourable conditions, as it is seen by the successful near-shore island landings operations in 1955 and the Paracels islands that Vietnam captured in 1974. The failure of the PLA to land in the Taiwan Strait and overpower Chiang Kai-shek and his Nationalists in and after 1949, however, is the best reminder that China requires a strong and hefty amphibious force to reunite by force. Permanent PLA amphibious troops were established as a result of this operation; however, they have undergone several restructurings (Shichun, 2018; McCauley, 2018; Simpler, 1974). The most recent changes to the PLAA and PLANMC amphibious units are described in this section.

i. **The New PLAA Amphibious Brigade:** The PLA's first amphibious force, formed in 1954, was a short-lived marine division. The PLA lacked specific amphibious

forces following its dissolution in 1957 until the 1st Marine Brigade of the PLAN was formed in 1980 (Faxin, 2013). The PLAA converted the ancient 1st Motorised Infantry Division, 1st Group Army,[1] and Nanjing Military Region into the 1st Amphibious Mechanised Infantry Division around 20 years after the PLAN had formed the 164th Marine Brigade from an army division.[2] Not long after, the 42nd Group Army, Guangzhou Military Region, announced the formation of the 124th Amphibious Division (Blasko, 2010). The sole mechanised amphibious troops in the PLAA were these two divisions and the already-existing 14th Armour Brigade, 31st Group Army, Nanjing Military Region (Figure 1).

Table 1: Post-2017 PLAA Amphibious Brigades

Theater Command	Group Army	Amphibious Brigade	Garrison
Eastern	72nd	5th Combined Arms 124th Combined Arms	Hangzhou
	73rd	14th Combined Arms 91st Combined Arms	Zhangzhou
Southern	74th	1st Combined Arms 125th Combined Arms	Guangzhou

During 2017, PLA "below the neck" adjustments, two amphibious divisions were divided into four amphibious combined arms brigades, while amphibious armour brigade and motorised infantry unit components formed two more amphibious combined arms brigades (OSD, 2019; China Army, 2020). Like their division predecessors, all of the new brigades were placed under group armies under the PLA Eastern Theatre Command and Southern Theatre Command[3], which is nearby. The PLAA was able to maintain its amphibious doctrine and tactics, techniques, and procedures (TTPs) (Blasko, 2021; Zhiwei & Lijie, 2009; Xu, 2020[4]) under the new amphibious brigades' ability to transfer much of the older construct's capabilities down to the battalion level (China Army, 2020; A 72nd Group Army Engineer Brigade Took Initiative to Solve Grassroots Problems, 2019) Shuoyang & Huihuang, 2019; Xi, 2019; Shishui, 2019) (Table 1 and Figure 2).

[1] The PLA Army (PLAA) group army is roughly equivalent to a U.S. Army corps.
[2] hereafter referred to as amphibious division
[3] located across from Taiwan
[4] The article does not specifically reference amphibious combined arms battalions, but it discusses how the PLAA combined arms battalion replaced the regiment as the basic combat unit.

Table 2: PLAA Amphibious Brigade Equipment/Elements[1]

Battalion	Battalion Equipment/Elements
Combined Arms BN x 4	Amphibious 105mm assault guns Amphibious IFVs Amphibious APCs Amphibious engineering vehicles Heavy mortar elements Air defence elements with MANPADS Reconnaissance elements
Reconnaissance BN	Amphibious reconnaissance vehicles with UAVs Technical reconnaissance troops
Artillery BN	Amphibious 122mm howitzers Tracked 122mm rocket artillery Tracked anti-tank guided missile systems
Air Defence BN	Tracked AAA systems Tracked short-range SAM systems MANPADS
Operational Support BN	Command and control systems Electronic warfare systems Engineering platforms Chemical defence platforms Security elements
Service Support BN	Logistics elements Medical support elements Equipment repair and maintenance elements

The PLAA amphibious brigade has about 5,000 units, a variation of the new heavy combined arms brigade that utilises the Armoured Brigade Combat Team of the US Army (Blasko, 2021) (Table 2 and Figure 3). Being a modular organisation, the new PLAA combined arms brigade has offered the combat and functional support companies and battalions to the commander that may be swapped to form the operational units adapted to specific objectives. The organisation of the amphibious brigade's battalions is likewise modelled after that of the group army, which enhances its capacity to draw upon corps-level firepower, intelligence, reconnaissance, and other assets. Four amphibious combined arms battalions within the PLAA's brigade and corps levels of force structure mirror the plug-and-play modularity of the force structure, enhancing the development of tactical combat strength (Ping, 2020; Xuanzun, 2020a; Jianwei & Ning, 2020).

The brigade is in charge of a landing sector with many battalion landing sites during PLAA island-landing operations (Ping and Wang, 2009). Compared to its predecessor, the single-service arm battalion, which necessitated the development of temporary combined arms formations, the new amphibious combined arms battalion is better organised and prepared to carry out the task against a landing place (Table 3) (Sina Military, 2016; Sohu, 2019).

Figure 1: Former PLAA Amphibious Mechanised Infantry Division (Conor, 2021

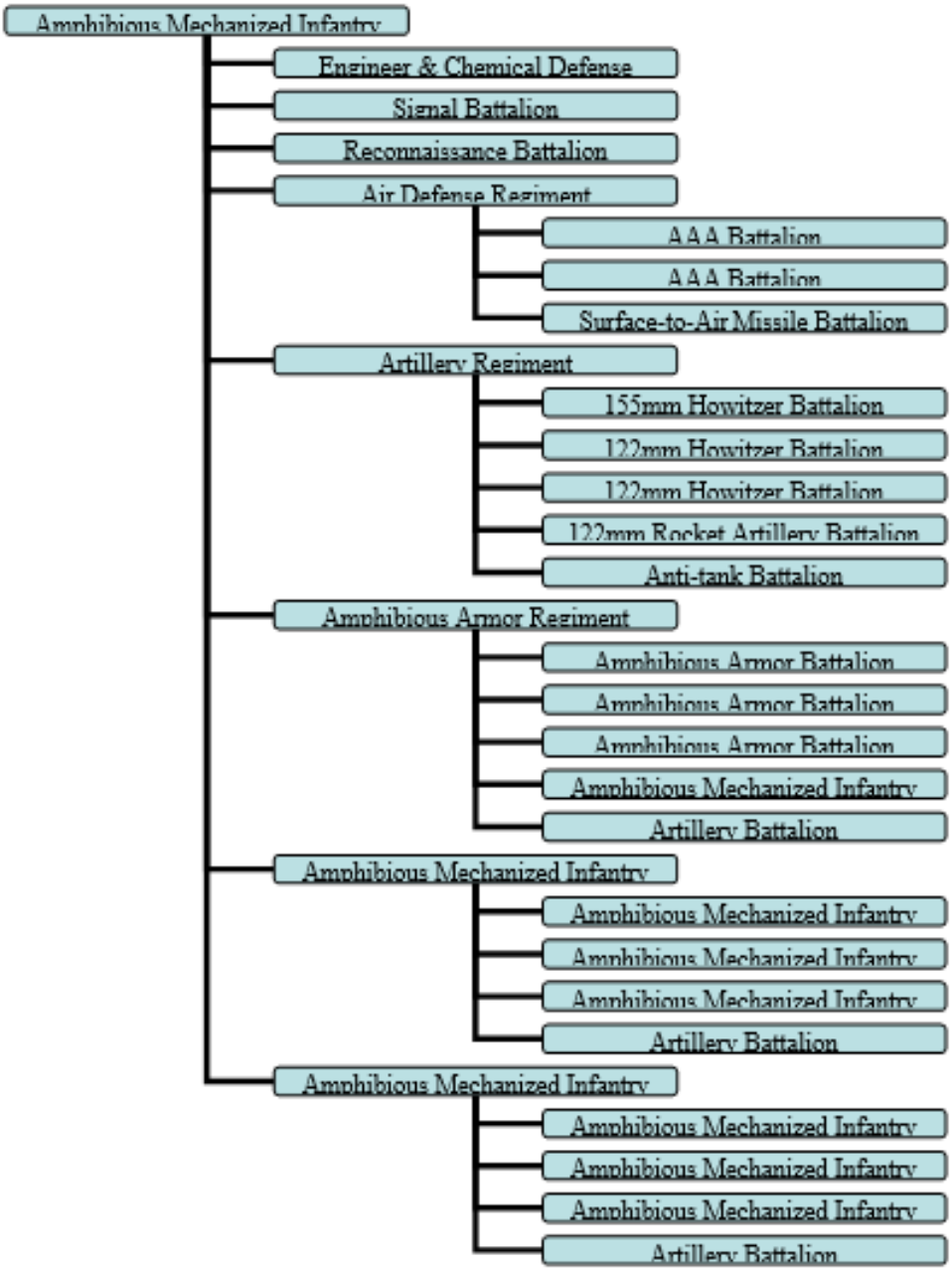


Figure 2: Post-2017 PLAA Group Army Structure[1]

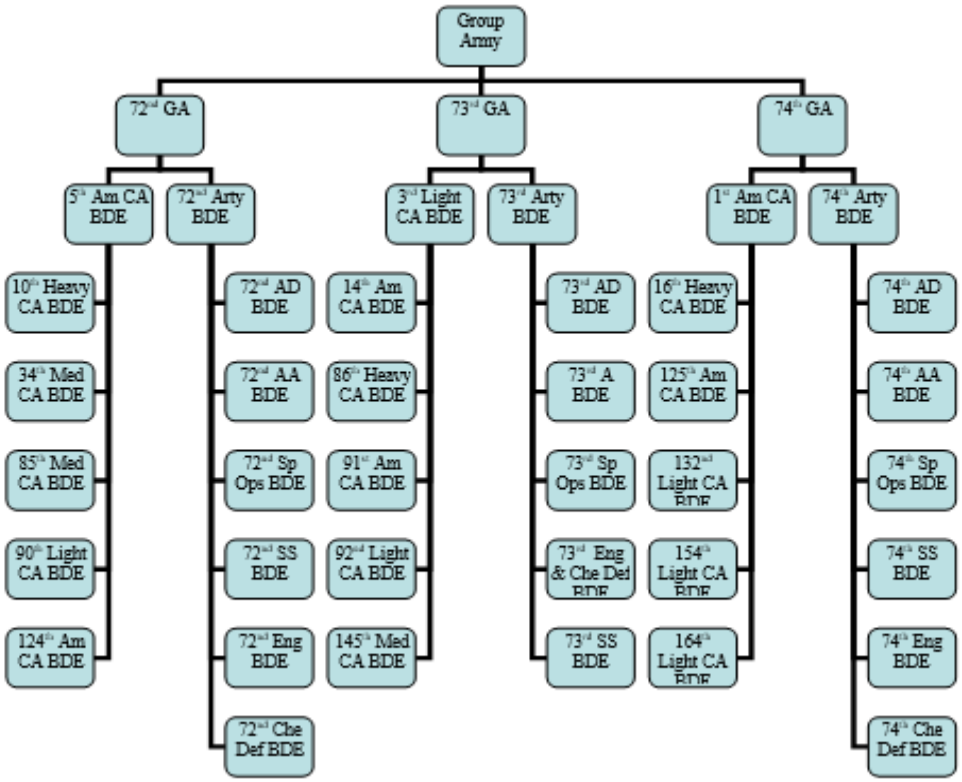
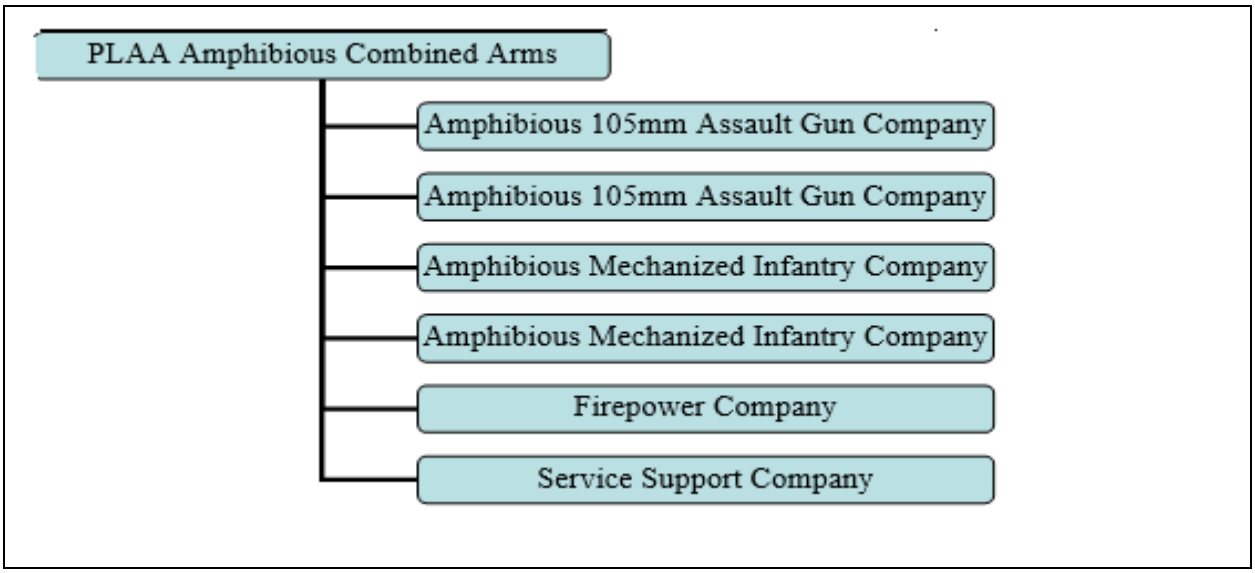


Table 3: Pre- and Post-Reform Amphibious Battalion Structure

Amphibious Maneuver Battalion Type	Amphibious Assault Vehicles	Amphibious IFVs	Organic Artillery and Air Defense	Organic Engineering	Organic Reconnaissance
Pre-reform Amphibious Mechanized Infantry Battalion	Task assigned	31 IFVs (3 companies)	6 100mm mortars (2 platoons)	Task-assigned from regiment	
Pre-reform Amphibious Armor Battalion	31 assault guns (3 companies)	Task assigned	Task assigned		
Current Amphibious Combined Arms Battalion	28 assault guns (2 companies)	28 IFVs (2 companies)	6 100mm mortars (2 platoons); 4 MANPADS (1 platoon)	1 platoon	1 platoon

Key: GA = Group Army; BDE = Brigade; CA = Combined Arms; Med = Medium; Arty = Artillery; AD = Air Defence; AA = Army Aviation; Eng = Engineer; Che Def = Chemical Defence; Sp Ops = Special Operations; SS = Service Support

Figure 3: PLAA Amphibious Combined Arms Battalion Organization



ii. **Expansion in PLANMC**

The new PLAA was also announced at the same time when the PLANMC was increased by two to six marine brigades, a new special operation forces (SOF) brigade, and an aviation brigade. The SOF and aviation brigades were formed by existing PLAN units, and the four new brigades by PLAA coastal defence units and an infantry brigade, giving the navy infantry staff of the PLAN expertise in fighting in the littoral. Further, the PLAN South Sea Fleet command was dissolved with the first and second brigades and PLANMC headquarters was created (Blasko and Lee, 2019a).

Before 2017, the South China Sea and traditional amphibious operations were the main priorities of the first two PLANMC brigades, which had identical organizational designs (Office of the Secretary of Defense, 2020). Four light infantry battalions, two amphibious armoured infantry battalions, a self-propelled howitzer battalion, and an organic amphibious armour regiment comprised each PLANMC brigade (Blasko, 2012; Kubec, 2023). Additionally, each brigade had combat support and light infantry battalions. Following the reorganization, all PLANMC brigades adopted structures akin to those of their PLAA combined weapons brigades.

However, the command structure of the PLANMC is not the same as that of a PLAA army group. The PLANMC HQ is a corps-level command that is located in Guangdong Province and reports to the PLAN headquarters directly instead of being a theatre command. Just like its counterpart PLA Air Force (PLAAF hereby) Airborne Corps, it has a unique chain of command and garrisons that are established around the Chinese coast, making it a national strategic asset of the PLANMC. With such an order of command, the PLANMC or PLAAF Airborne Corps will never be deployed full strength like a PLAA group army would have been, but in smaller units or strengthened brigades (Blasko & Lee, 2019).

The 2017 rise and the introduction of PLANMC squads to the PLA station in Djibouti point to the fact that China seems to be set on the PLAN naval infantry division of combined expeditionary operations abroad. Simultaneously, the PLAN is increasing its training to new locations and climates, with some unused abilities of small reef and island operations in the South China Sea. The PLANMC is also preparing to shift to a leaner force structure that would ensure it is only used in any operations against Taiwan on small-scale operations or supporting missions in a major conflict, but maximise its capabilities in any operations that safeguard the interests of China overseas (OSD, 2020).

The six new PLANMC brigades are not standardised nor built in such a way that they can be integrated into an army-based island-landing force, unlike PLAA amphibious brigades. Not as well-known are some of the latest PLANMC brigades, especially those with roots in PLAA coastal defence forces. The 1st and 2nd brigades appear to be still well armed with Type-5 amphibious series tracked vehicles and the less wheeled chassis (Table 4); however, three out of four of the new brigades appear to be equipped differently (Blasko and Lee, 2019a) (China Army, 2020).

Table 4: PLANMC Equipment

Brigade	Known Equipment
1st	Type-05 heavy amphibious tracked chassis; Type-09 8x8 wheeled chassis (CCTV, 2020b)[14]
2nd	Type-05 heavy amphibious tracked chassis; Type-09 8x8 wheeled chassis[15](Xin, 2019)
3rd	Type-09 8x8 wheeled chassis (A Certain PLANMC Brigade: Implement the Spirit of the Plenary Session and Strive to be a Pioneer in Transformation, 2020)
4th	Type-09 8x8 wheeled chassis (CCTV, 2020c)
5th	Type-09 8x8 wheeled chassis (WeChat, 2020)
6th	Type-05 amphibious tracked chassis; Type-09 8x8 wheeled chassis; Lynx 8x8 all-terrain vehicle

There are at least three distinct battalions in the 6th PLANMC Brigade: heavy amphibious, medium wheeled, and light air assault. The PLANMC would be able to field a force package in the future that is prepared for both amphibious operations and non-war military actions if the 6th Brigade serves as a model for the other brigades. However, a PLANMC brigade would not be fit as the first echelon major landing force during an opposed Taiwan landing because of the brigade's insufficient quantity of heavy armoured amphibious platforms, as per the current amphibious operations doctrine. The Type-5 series, the main amphibious armoured vehicle used by PLAA and PLANMC, is unmatched by any foreign armed forces. The PLA landing force has access to a universal armoured fighting platform that can swim great distances thanks to the Type-5 vehicle series, which was created specifically for amphibious landing operations (Table 5).

Table 5: PLAA and PLANMC Vehicles[17]

Platform	Type	Weapons	Crew Capacity
ZBD-05	IFV	30mm cannon; 7.62mm MG; HJ-73 ATGM	3 crew + 8 infantry
ZLT-05[18]	Assault gun	105mm gun; 12.7mm MG; 7.62mm MG	4
PLZ-07B	Howitzer	122mm gun; 12.7mm MG	5

The Type-5 versions also fielded in the PLAA and PLANMC include armoured personnel carriers, armoured recovery vehicles, command and control vehicles, artillery command vehicles, communications vehicles, armoured breaching vehicles, and reconnaissance vehicles. While the majority of PLAA amphibious brigades are now armed with Type-5 series weapons (Jane, 2020a), certain units—like the Type-63A light amphibious tank retain first-generation gear. Although their afloat speed is much slower than that of the Type-5 vehicles, the Type-9 8x8 wheeled vehicles, which are found in each PLANMC brigade and non-amphibious PLAA brigade, are designed to be capable of amphibious operations (Ibid.). These vehicles include the ZTL-11 105-millimetre assault gun and the ZBL-9 infantry fighting vehicle. The amphibious brigades of PLAA and PLANMC, which were reorganised, possess the distinct qualities of each type of amphibious vehicle, enabling them to execute a diverse variety of missions that vary in terms of force projection and scale (Jane, 2020c).

3. PLA Amphibious Unit Role in Joint Blockade and Island Landing Campaigns

The first of the PLAA's multiple strategic missions is to take part in large-scale operations to maintain national unity in the "main strategic direction," which refers to the Taiwan Strait (Jane, 2020b). The document states that the PLAA would have to take part in blockade and control operations, firepower strikes, island-landing operations, and defensive operations as the main ground component in a large-scale combined operation. Above all, the text makes it clear that the PLAA will attack urban defended sites, beaches, and islands, as well as take part in combined island-landing operations and post-conflict stabilisation operations.

Several PLAA operational art writings from before the reform evaluated the PLANMC brigades' duties in securing landing sites and opening sea lines for the PLAA amphibious division's breakthrough as the first landing force (Xiaosong, 2013). Despite having large amphibious platforms that were well equipped for these tasks, the new PLANMC brigades' organisational structure suggests that PLAN did not plan to employ its naval infantry as the first landing force in a coordinated island landing operation against Taiwan. However, the PLAN does have some ability to take part in small-scale operations that assist a landing campaign and island-blockade operations, thanks to the new brigades. How PLAA and PLANMC troops would take part in a joint island landing campaign and joint island blockade (Conor, 2021) is explained in the following sections.

i. **Combined Island Blockade Campaign:** The PLAA has made island blockade and control operations, which indirectly target Taiwan, a top priority (Ping and Wang, 2009). In addition to using kinetic and non-kinetic weapons to support the PLAN and PLAAF, the PLAA is also using manoeuvre troops to land on strategic offshore islands. In a coordinated island blockade operation, the army's task is to assist in severing Taiwan's military and economic connections with the outside world, isolating and frightening the government into obedience and fostering advantageous circumstances for subsequent invasion operations (Yafeng, 2009).

For island blockade operations, the more experienced PLANMC brigades and the more recent PLAA amphibious brigades are ideal. In island blockade operations, ground forces take part in four stages: preparing for battle and deploying forces; impeding the enemy and taking control of the blockaded area; enforcing a sustainable blockade to gradually wear down and weaken the enemy; and combining offensive and defensive manoeuvres to defeat the enemy's counter-offensive (Yafeng, 2009; Zhang, 2006).

PLAA amphibious brigades of the 72nd and 73rd group armies (Masafumi, 2022) are now stationed in areas that allow for quick manoeuvrability to Chinese coasts along the Taiwan Strait during the deployment phase (Yafeng, 2009). Although the PLAA and PLANMC possess the firepower and amphibious landing equipment to send landing troops to Taiwan's offshore islands like Jinmen and Matsu, the PLAN, PLAAF, PLA Rocket Force, and PLA Strategic Support Force concentrate on long-range and strategic capabilities against Taiwan. Once on the islands, the PLAA amphibious brigades could maintain situational awareness using their organic reconnaissance and electronic warfare systems, and the PLAA air defence battalion could provide point defence of important command and control hubs for PLAA units involved in the blockade operations.

The PLAA amphibious brigades are also set up to take part in a coordinated firepower strike during the paralysis phase. In this regard, PLAA amphibious brigades have a significant edge over PLANMC brigades. The precision and range of PLAA rocket artillery and amphibious brigade howitzers allowed them to suppress tactical defence objectives on Jinmen and a large portion of the Matsu Islands (China Army, 2019). Not every PLANMC brigade has a self-propelled chassis, but all of them have fire support battalions. PLANMC brigades may only be able to use tube artillery for organic fires if they possess rocket artillery, which is unknown. Through their new organic electronic warfare company, which the PLANMC lacks, the new PLAA amphibious battalions may also contribute to information dominance in this phase (Jane, 2020d; OSD, 2019).

The smaller outlying islands of Taiwan are also taken during the paralysis phase to obstruct counter-blockade efforts and restrict the passage of enemy aircraft and ships (Yafeng, 2009). Near-shore island offensive operations are seen by the PLAA as "three-dimensional" missions to seize entire smaller islands or parts of larger ones. These activities would probably be PLAA-focused and involve the other services just a little. Because Type-5 series vehicles and other PLAA amphibious brigade equipment can swim from coast to island in favourable weather and sea states, near-shore operations would allow PLAA amphibious brigades to arrive without the requirement for transport boats. The small island landing concept of PLAA also requires air assault forces to take up strategic positions (Ping and Wang, 2009). Units from the same group army might be employed for close air support

and rear area landings since PLAA SOF brigades and light combined arms brigades train alongside army aviation brigades for air mobility operations. For comparable missions, the PLANMC would very definitely rely on cooperative support, even if select brigades would still have organic air attack assets.

ii. **Joint Island Landing Campaign:** The PLAA would lead the charge in breaching the enemy's coastal defences, establishing a beachhead, eliminating and repelling entrenched defenders, and fostering an environment that would be conducive for second-echelon troops if given the order to reunite Taiwan militarily. This massive war, intended to destroy separatist troops while limiting needless civilian losses and protecting civilian infrastructure, would only take place when all diplomatic and political avenues had been exhausted. For a landing operation, late March to late April or late September to mid-October would be the best times (Yafeng, 2009). Advance operations, embarkation and sea crossing, and assault onto land to create a landing site are the three main phases of a landing campaign; however, the sea crossing and landing phases may involve additional specialised activities (Ping and Wang, 2009; Zhang, 2006).

iii. **Advance Operations:** As part of the landing campaign's advanced operations phase, a coordinated firepower strike is conducted in tandem with efforts to establish air, sea, and information superiority (Zhang, 2006). Other than offering limited point air defence capabilities, neither PLANMC nor PLAA amphibious brigades are built or prepared to take part in this stage of operations. Neither brigade type is equipped to launch anti-ship gunfire, and they lack electronic warfare capabilities and long-range weapons that may reach Taiwan's coasts.

iv. **Embarkation and Sea-Crossing:** By converting amphibious divisions into amphibious brigades, the PLAA's capacity to take part in the embarkation and sea-crossing phase of the island-landing campaign was significantly enhanced. The amphibious brigades consolidated all of their subordinate battalions into a single site during the 2017 reorganisation, which facilitated faster mobilisation times. The amphibious brigades of the PLAA are now stationed strategically close to ports of embarkation to enable prompt transportation to their gathering places and loading into amphibious-capable ships. This placement reduces their vulnerability to enemy gunfire during the critical loading and transit stages, particularly if they are carried out at night (Ping and Wang, 2009).

At loading zones, the PLAA amphibious brigade is prepared to use its point air defence system. Air defence battalion and combined arms battalion assets of the amphibious brigade might supplement PLAN, PLAAF, and PLAA medium- to long-range air defence systems with short-range protection for the embarkation area and at sea (Sina News, 2019).

Additionally, PLANMC brigades are situated close to important ports of embarkation, ensuring that transferring the units to their loading zones would be as simple as possible. PLANMC brigades appear to be mostly armed with antiquated towed anti-aircraft artillery pieces, although they have air defence battalions. Although they don't have the range, precision, or mobility of the equipment that PLAA amphibious brigades now deploy, these guns might be used as close-range point air defence. These PLANMC units would become dependent on PLAAF and PLAN air defence assets at higher echelons because of this weakness.

v. **Selection of Landing Sections and Points:** Modern PLAA amphibious brigades are equipped to assault a wider landing section compared with their smaller regimental predecessors. An amphibious brigade commander could assign 2

amphibious combined arms battalions[2] to defeat defending companies on a 2- to 4-km front, an objective previously assigned to a reinforced amphibious infantry regiment (Ping and Wang, 2009). Amphibious landing battalions in the PLAA before the reform were centred on landing sites that ranged in breadth from 0.5 to 1 km. Now, an amphibious brigade commander can ensure that the reserve combined arms battalions and secondary landing point stay close enough to each other for mutual support within the landing section, while simultaneously increasing combat power against the main landing point by transferring brigade-echelon elements down to the combined arms battalions. The extended landing point width of an individual amphibious combined arms battalion is probably now 1.5 to 2 km, meaning that the brigade landing section would be around 3 to 4 km in front. If this is correct, two brigades of amphibious troops might land in a space about the same as a division.

vi. **Troop Allocation and Deployment:** In three to five attack waves, the commander of one of the PLAA's old amphibious divisions would use ten main units. The same operating group organisation as its division predecessor is made possible by the modular design of the new amphibious brigade (Table 6). Many of the self-propelled weapon systems and corps-level aviation resources needed for an organisation like this are not available to new PLANMC units.

vii. **Opening of Landing Pathways:** Each amphibious combined arms battalion now has its own engineering and reconnaissance platoons, which may be reinforced by brigade-level units to create landing routes—a function that formerly needed regimental resources. This is known as the new amphibious brigade organisation. (CCTV, 2019; Ping and Wang, 2009). To provide cover fire for these initial landing parties, coordination with supporting aircraft units is made possible by the combined arms battalion staff. Evidence also points to the possibility that, before the deployment of engineering soldiers, at least one amphibious brigade would utilise a novel unmanned device to eliminate water barriers close to the coast (Blasko, 2020). According to PLA media, the engineering and reconnaissance capabilities of the 1st and 2nd PLANMC brigades, as well as perhaps the 6th Brigade, are comparable at the brigade and battalion levels. It is unclear, though, if the new brigades also have their support forces at the same echelons (Jane, 2020a).

viii. **Debarkation, Swimming, and Direct Fires:** As per the PLA policy, cargo vessels are usually debarked by amphibious armour 4 to 8 kilometres from the beach before they start their swim. The above-mentioned barrier reduction elements comprise the first waves, which are then followed by infantry and armour assaults, artillery, and supporting troops (Ping and Wang, 2009). The addition of 28 amphibious assault weapons to each combined arms battalion boosted the quantity of direct fire support for the attacking waves, even if the reorganisation most likely had little influence on the debarkation of TTP With the ZLT-5 105-mm assault weapons and Type-5 reconnaissance vehicles, the commander may now more effectively direct fire against critical enemy objectives, such as firing sites, fortifications, and armoured vehicles up to two kilometres from shore, under ideal circumstances (Wei et al., 2012; Yinggui et al., 2008).

Key: GA = Group Army; BDE = Brigade; CA = Combined Arms; Med = Medium; Arty = Artillery; AD = Air Defence; AA = Army Aviation; Eng = Engineer; Che Def = Chemical Defence; Sp Ops = Special Operations; SS = Service Support

Table 6: PLAA Amphibious Brigade Landing Groups

Group	Mission	Amphibious Division Unit Assigned	Amphibious Brigade Equivalent
Advance Landing Group	Get ashore first to seize key points; provide reconnaissance to landing units	Task-assigned: one SOF BN or two PLANMC BNs	Reconnaissance BN and combined arms BN reconnaissance platoons
Air Assault Group	Air Assault Group Seize enemy frontline positions and key points in-depth; stop enemy combat reserve from counterattacking	Task-assigned: one air assault BN	Task-assigned: one air assault BN
Assault Landing Group	Land on main and secondary directions; seize and control landing section; ensure deep assault group can enter combat	Two amphibious infantry regiments; task-assigned amphibious tank, artillery, air defence, engineer, and chemical defence elements	Two amphibious combined arms BNs
Deep Assault Group	Attack and occupy defensive in-depth positions; expand and consolidate landing section; ensure follow-up landing troops get ashore	Amphibious armour regiment; task assigned amphibious infantry, artillery, and engineer elements	One amphibious combined arms BN
Firepower Assault Group	Destroy enemy artillery, C2, EW, and ISR locations; strike enemy armoured targets and fortified defence works; attack enemy helicopters and assist air assault group	Artillery regiment;[15] task-assigned army, aviation platforms	Artillery BN; task-assigned army aviation platforms
Combat Reserve Group	Go ashore immediately after deep assault group; carry out mobile combat tasks to deal with unexpected scenarios	One task-assigned combined arms BN with anti-tank, engineer, and chemical defence elements	One amphibious combined arms BN
Air Defense Group	Go ashore with a deep assault group or firepower assault group; conduct aerial reconnaissance, prevent enemy reconnaissance, and defeat enemy aviation and airborne weapons over the combat area	Air defence regiment	Air defence BN

Additionally, an integrated PLAA aviation officer is frequently part of the PLAA combined arms battalion staff. In theory, this configuration enables the combined weapons battalions to seek attack helicopter assistance, which would enable them to accomplish better landing point impacts than their predecessors. However, there is still doubt about the PLAA's close air support degree of competence during the landing phase. Because the PLAN lacks attack helicopters, the PLANMC units are forced to depend on combined land-based aviation assistance. With the growth of the PLAN-MC Aviation Brigade, this position may alter.

ix. **Beachhead Landing and Expansion:** Even after the joint firepower strike, the PLA anticipates that the amphibious combined arms battalions' landing on the enemy coast will rank as the most violent operation in a joint island landing campaign. According to PLA experts, Taiwanese military defenders would focus all of their firepower on armoured vehicles that are landing, and destroyed vehicles might reduce the number of access points to the beach (Hui et al., 2019).

The amphibious regiment was replaced as the primary ground force in a joint island landing operation by the combined arms battalion of the amphibious brigade, thanks to the 2017 changes that dismantled the PLAA's command structure (Conor, 2021). Thus, the amphibious combined arms battalion could now respond to shoreside circumstances on its own and, when needed, request joint backup from higher echelon PLAA. With fewer command echelons and digital communications, this setup enables joint commanders to respond to successes and failures at various landing sites and to transmit orders more swiftly (Feng et al., 2018; Roth, 2025). This structure also guarantees that brigades of the PLAAF Airborne Corps and

PLAA air assault forces landing further interior would be better equipped to coordinate with soldiers arriving from the beachhead.

In terms of combat support, the new amphibious brigades and amphibious combined arms battalions are superior to their predecessors. In the past, the regiment was in charge of tasks including medical rescue, equipment recovery, and material support. Lower echelon units may now carry out these tasks independently, thanks to the creation of combined arms battalion service support companies and amphibious brigade service support battalions. The amphibious combined arms battalion can seek assistance from adjacent amphibious brigades and other services (Chongling, 2019). It is outfitted with armoured recovery and medical vehicles to handle casualties. Staff members of combined arms battalions may now better respond to logistical demands by keeping an eye on ammunition and fuel use thanks to new battle information systems (Qian & Hongqi, 2019).

Amphibious brigades would be employed to repel enemy counterattacks and increase the area of control after effectively demolishing enemy fortifications, gaining beachheads, and setting up on-site command posts. This would allow air assault forces landing two to four kilometres offshore to join with non-amphibious platforms that are coming ashore by landing boats to relieve the first echelon landing soldiers. These support units might also take part in activities aimed at establishing contact with Airborne Corps troops of the PLAAF that were positioned further behind (Ping and Wang, 2009).

Though it's unknown if they could enlist the assistance of combined forces and higher echelon ground components, the two initial PLANMC brigades may launch attacks like this. Because of the degree of protection needed to attack amphibious armoured vehicles, the four PLANMC brigades that remain are unable to carry out this kind of extensive landing operation. Additionally, a PLANMC brigade would find it more difficult to transfer landing site control to follow-on troops than a PLAA amphibious unit in the same group army as its relieving

4. Training and Exercises

The PLA has long put a high value on amphibious training because of the complexity of opposing amphibious landings. PLAA amphibious units continued to conduct regular training cycles centred on amphibious landing throughout the year, with the majority of exercises taking place between May and September, both before and during the 2017 reorganisation (Blasko, 2012, p. 188). On the other hand, the two PLANMC brigades had already started training for operations in arctic, forest, plateau, and desert circumstances before the changes (Blasko and Lee, 2019b). The PLANMC has maintained a significant portion of its training for amphibious landings despite the increased emphasis on operational conditions.

i. **PLAA Amphibious Brigade Training during 2017–2020:** Following the reorganisation in April 2017, PLAA amphibious training rapidly increased in complexity, with brigades initially concentrating on training at lower levels. While the amphibious brigades were recently formed, their origins sprang from previous amphibious divisions or an amphibious-capable armour brigade, guaranteeing little disruption to training and a rather stable doctrine. Therefore, it seems that PLAA amphibious brigade training activities for the balance of 2017 and all of 2018 were focused on enhancing the skills of the newly formed amphibious combined arms battalions and their staffs (CCTV, 2017; PLA Daily, 2017; CCTV, 2018).

Multi-battalion amphibious exercises were prioritised starting in 2019, and training on sophisticated TTPs such as loading and unloading at sea and carrying out nocturnal operations was increased (WeChat, 2019; Roth, 2025). By 2020, the amphibious brigades of the PLAA had gained more confidence to showcase their new operational support and reconnaissance battalions' capabilities as well as brigade-level drills (Zhuowu et al., 2020; China Military TV Online, 2020d & 2020e).

The 73rd Group Army's amphibious brigade gained attention in 2020 when the PLA released articles and videos showcasing the unit's capabilities during the training cycle that ran from May to September. Videos from September 2020's last brigade-level multi-battalion drill were released by official PLA media outlets in October 2020. The films showed the whole landing operation, including the amphibious brigade embarking on PLAN warships in the nighttime and the brigade's electronic warfare vehicles preparing for battle. During the drill, the PLA also showcased the capabilities of its recently developed load-carrying unmanned land vehicles and seaborne unmanned obstacle removal devices. However, the purpose of this kind of landing drill extends beyond teaching PLAA soldiers about amphibious operations[3] (China Military TV Online, 2020a; Blasko, 2020).

One of the trickiest military operations is a large-scale amphibious assault, which would probably put a burden on the PLA's resources. Small island-landing operations against Matsu or Jinmen are a better fit for the PLA; however, even such missions carry a high political risk (OSD, 2020, p. 114). Even though it is acknowledged that carrying out large-scale landing operations presents certain difficulties, amphibious brigades landing in opposing force drills are often shown in PLA media. Chinese deterrence benefits from the existence and well-publicised training of these units, which terrify Taiwan and show other regional countries that the PLA is willing to carry out difficult amphibious operations against Taiwan upon orders. China employs military intimidation as a means of threatening future military assault or military escalation, and large-scale military drills are one of its grey zone activities (Morris et al., 2019)[5].

Publicising specific landing procedures is a top priority when there is tension between China and Taiwan, since it serves as a signal to both Taiwan and the US audiences. Chinese media outlets, which the US government views as propaganda, frequently characterise those drills as warnings against Taiwan's independence and as proof to Washington that the PLA is capable of carrying out a reunification-by-force operation (Xuanzun, 2020b; Magnier, 2020; Brunnstrom & Pamuk, 2020). This is an illustration of how China's "Three Warfares" may use regular PLA amphibious training exercises for strategic advantage. In addition to China's employment of legal warfare, PLA media agencies engage in psychological warfare by influencing foreign decision-makers and media warfare by swaying public opinion worldwide with films and photographs of amphibious training exercises (OSD, 2020).

ii. **PLANMC Brigade Training during 2017–2020:** Following the 2017 reorganisation, there was not a discernible decrease in training events because the first two PLANMC brigades were mostly preserved. Throughout 2017, several

[5]According to this study, the gray zone is defined as an "operational space between peace and war, involving coercive actions to change the status quo below a threshold that, in most cases, would prompt a conventional military response, often by blurring the line between military and nonmilitary actions and the attribution for events."

small-scale drills proved that the 1st and 2nd brigades could carry out successful small-scale island and reef seizures (Panyue, 2017). Throughout 2017, the four new PLANMC brigades were noticeably absent from known training exercises as they converted from PLAA light infantry units to naval infantry. But starting in 2018, the 6th Brigade started to appear often in PLA media, and by 2020, the 1st, 2nd, and 6th Brigades were shown carrying out more extensive landing drills with a focus on including several service arms. Events, however, seemed to be mainly consistent with the conventional PLANMC South China Sea mission plan (Yan et al., 2018; Sina Weibo, 2020; China Military TV Online, 2020c). Furthermore, the 4th and 5th brigades were seen driving new wheeled Type-9 vehicles in PLA publications and films. However, their training was restricted to driving and firing at events like the ones the PLANMC publicises about its soldiers in Djibouti, where complicated amphibious landings are not necessary (Lei and Zhou, 2017; CCTV, 2020; WeChat, 2020).

Unlike PLAA amphibious brigades, PLANMC employs its naval infantry to interact both domestically and internationally with its allies. Even while PLANMC SOF brigade elements seemed to be used in most training activities, PLANMC conventional troops were also participating more in international exercises. A landing was carried out by troops of a PLANMC heavy combined weapons battalion in southern Guangdong Province (Panyue, 2019) during the Sino-Thai joint naval operation Blue Commando-2019 in May 2019. PLANMC members engaged in cooperative landing exercises with Pakistani marine forces in January 2020 (CCTV, 2020a). From 2015 to 2019, PLANMC armoured vehicle components were also often involved in Russia's International Army Games "Seaborne Assault" competition; in 2018, they hosted the event (Yi, 2019; Yu, 2018). These drills are probably used by the PLA to show off its might to rivals in the region and the capabilities of its amphibious vehicles to prospective purchasers of Chinese systems and weapons.

5. Post-Reform Disadvantages and Challenges

While the 2017 reorganisation made PLAA amphibious brigades more capable of executing amphibious operations against Taiwan, commanders faced additional difficulties as a result of the numerous adjustments to personnel, equipment, and organisation. In a similar vein, PLANMC brigade commanders are not properly trained in amphibious operations and do not have a complete table of equipment. Most crucially, units from both services are unable to take part in a coordinated island landing campaign because of insufficient amphibious transport.

The previous amphibious divisions were replaced with PLAA amphibious brigades, which enhanced action independence and information flow velocity. However, tactical commanders faced a new set of challenges as a result of the growth in combat strength at the amphibious brigade and amphibious combined arms battalion levels. With each battalion now having more than ten service arms instead of just one, combined arms battalions grew in size overall. Commanders of amphibious mixed arms battalions are now in charge of more than just infantry companies; they are also in charge of service weapons such as artillery, armour, air defence, reconnaissance, signal, engineering, chemical defence, and others that were formerly limited to brigade and division levels. Compared to before the reorganisation, the commander may now oversee more than twice as many amphibious platforms thanks to the new amphibious combined arms battalion staff. Additionally, it allows the commander to modify actions before the soldier's land by utilising real-time battalion reconnaissance capabilities (Roth, 2025). Tactical commanders, however, would

have to contend with a complicated electromagnetic environment; competing requests from subordinate, lateral, and higher units; and vulnerabilities arising from networked command and information systems, even with a modest combined arms battalion staff. A landing operation might be marred by mishaps and bad combat judgment due to these additional criteria (Hui et al., 2019, p. 44; Delin et al., 2019).

The efficacy of the amphibious brigades may also be lowered by the dearth of significant amphibious landing drills. The PLA will probably require a few more years before it feels comfortable conducting larger training exercises with many amphibious brigades landing at the same time, as brigade-sized landing events just started to occur in 2020. While combined capabilities were used in recent smaller-scale exercises, with PLAAF planes providing fire support and PLAN warships carrying PLAA landing forces, the restricted size does not accurately reflect the realistic requirements envisaged during a joint island invasion operation (Hui et al., 2019).

Additionally, the amphibious troops' fighting potential is diminished by insufficient opposing force training. Unlike other PLAA combined arms brigades, the army's amphibious brigades haven't travelled across the theatre to the PLA's Joint Training Base in Zhurihe in Inner Mongolia, which serves a similar function to the National Training Centre of the United States Army. Consequently, the amphibious brigades have been deprived of the chance to practice large-scale exercises like Stride against that base's designated restricted opposing force unit. The PLAA amphibious battalions most likely train against imaginary opponents or themselves in the absence of such experience. Like most army units, the amphibious force is largely composed of 2-year conscripts; thus, it lacks realistic training and is therefore unprepared for the kind of high-intensity conflict that would be expected during a landing in Taiwan. This element, together with the requirement for soldiers to use contemporary digital tools, may cause problems at every level of the command structure during the landing.

Another issue for PLAA amphibious units is logistics support. To provide a continuous supply chain from campaign to tactical levels during a fight, the PLAA established group army service support brigades, combined arms brigade service support battalions, and combined arms battalion service support companies. Nonetheless, the PLAA's service support brigades' principal mission is to support the group army command posts. The amphibious brigades and battalions rely on their logistical skills and the PLA Joint Logistic Support Force for support (Zihao, 2019). The PLA anticipates that landing forces, limited to carrying their load-outs during the first assault, may have difficulties due to the quick consumption of fuel, ammunition, and other resources (Qian & Hongqi, 2019). While the amphibious brigades' tactical support forces participate in landing exercises, it is unclear how much—if any—the Joint Logistic Support Force participates in these drills (OSD, 2020, p. 48). If the amphibious brigades do not establish a solid working relationship with the Joint Logistic Support Force before a landing operation, they may struggle to remain prepared for war once the fighting begins. The biggest disadvantage for freshly constituted PLANMC brigades is the slow equipment fielding pace (Blasko, 2021). Three of the four new brigades do not have enough mechanised forces to support the full range of overseas operations for which they must prepare, such as humanitarian assistance and disaster relief, as well as other non-war military activities, although the 1st and 2nd brigades retain their pre-reform equipment. Following the transition from the previous PLAA 77th Motorised Infantry Brigade, the new 6th Brigade appears to be the only other combat-ready force based on the pace of training activities and equipment fielding (China Navy, 2020). Except for providing soldiers to the PLAN station in Djibouti, the 4th and 5th brigades are mostly combat-ineffective for any type of amphibious landing or foreign deployment, even though they each field at least one battalion of medium-wheeled Type-8 chassis.

Similar to the PLAA amphibious brigades, the new PLANMC brigades similarly struggle with a deficiency of practical training and drills. While the 6th Brigade is ostensibly testing a new

organisational structure and the 1st and 2nd Brigades have prepared for operations in diverse locations, it appears that the remaining Brigades mainly receive training on the usage of recently deployed technologies. Although the PLA frequently presents the PLANMC as operationally prepared for special reconnaissance and shipboard operations, the amphibious brigades' capabilities are often overlooked in favour of PLAN-MC SOF brigade capabilities in many of these media stories and movies.

Ultimately, the absence of PLAN amphibious transport is the biggest obstacle facing PLA amphibious units. Both services depend on the modest number of contemporary PLAN warships, such as the Type-72 tank landing ship (Joe, 2019) and the Yuzhao Type-71 dock landing ship (Conor, 2021), which are assigned to the PLAN's east and south sea fleets, for island-landing exercises (ibid.). The PLAN is still producing a limited number of amphibious assault ships, most notably the two recently built Yushen Type-75 helicopter assault ships (OSD, 2020; Roth, 2025). Although they rarely participate in significant amphibious training, PLAA coastal defence units do maintain small transport squadrons armed with antiquated Type-271 landing boats that could be used in near-island operations. According to the US Department of Defence, rather than preparing for a beach invasion of Taiwan, the little increase in large oceangoing amphibious ships shows a near-term focus on regional and eventually global expeditionary actions (Jiaqing et al., 2019).

The employment of unprotected civilian ships, such as ferries and roll-on/roll-off vessels, would be inappropriate for a beach invasion in Taiwan, despite the PLA's training to move troops in such vehicles (Zhang, 2006). The PLAA amphibious brigades would not be able to conduct a coordinated island landing operation with any degree of efficacy if they did not have enough PLAN medium and heavy lifters. Additionally, if PLANMC brigades were assigned to smaller, separate operations throughout the campaign, confusion may result regarding the transport priority of the amphibious forces of each service. The PLAA would probably prevail in such a contest since the combined island landing operation largely depends on the PLAA's amphibious beach invasion to create the circumstances for success. Still unclear, though, is the PLAN's willingness to station its priciest modern amphibious transport ships close to a landing zone and possible Taiwan anti-ship attacks.

6. Conclusion

The 2017 PLA force-wide restructuring boosted the strength of the PLANMC's amphibious force, as well as transforming the PLAA's current amphibious divisions into more modular combined arms brigades. As a result, both PLA agency improved their ability to carry out specific missions in the future. While PLAA amphibious brigades have been increasingly focused on a single purpose of a Taiwan landing operation, PLANMC amphibious brigades appear to be morphing into potential "first responders" for a range of scenarios around Asia. The PLAA needs to maintain its mandate because the prior amendments would have resulted in severe cuts (Chen, 2019).

That powerful PLAA force might not, however, accurately reflect Chinese amphibious operations in the future. From "large-scale amphibious landings" to "small-scale special operations" (PLA Daily, 2018), amphibious operations will no longer be conducted on that scale in the future. By using a full-spectrum strategy including all operational domains, these modifications would modify the fighting requirements from employing amphibious armoured vehicles to "seize a beachhead and establish a zone" to "attacking a point to control an area." Additionally, the report states that the need for amphibious equipment has changed from being able to "break through beach defences" to "ensuring ships reach targets." The paper also focuses on changing combat support from the "beachhead on land" to the "floating base at sea" and from "last-minute urgent deployment" to "routine forward deployment." Every element suggests that some PLA strategists

consider the PLANMC's capabilities to conduct full-spectrum operations overseas to hold the key to the future of amphibious operations.

Future amphibious operations could need to go from vast numbers and scale to "streamlined and highly capable," as well as dynamic and precise leadership. These ideas are already being put into practice by the recently formed PLAA amphibious battalions. The authors draw the conclusion that "manned and informationized" amphibious operations may give way to "unmanned and intelligentized" ones in the future (Ibid.). There's already proof that the amphibious brigades of the PLAA are experimenting with new unmanned technology for equipment load-carrying and barrier demolition (Blasko, 2020). Even if future amphibious aims would be better suited for their PLANMC counterparts, these improvements show that the amphibious brigades are at the forefront of technical growth in the service, indicating that their degree of relevance to the PLAA remains high.

However, the possibility of amphibious operations in a coordinated island invasion campaign against Taiwan is not mentioned in the text. Because the PLA's campaign requires early mobilisation, rapid transportation, and sophisticated landings to establish beachheads in a violently contested assault, more than small-scale special operations are required to strike vital positions and gain aid from floating bases. To overrun Taiwan's shore defences, the campaign would require highly competent heavy amphibious mechanised units capable of landing at many locations. The PLAA, whose brigades routinely demonstrate their expertise in island-landing operations, continues to command the PLA's most formidable amphibious landing formations (Zhang, 2006, p. 37). Nonetheless, these forces remain highly deterrent in the absence of a determined strategy for developing sufficient naval lift.

References

Blasko, D. J. (2010, August 19). PLA Amphibious Capabilities: Structured for Deterrence. *China Brief, 10*(17). https://jamestown.org/program/pla-amphibious-capabilities-structured-for-deterrence/

Blasko, D. J. (2012). The Chinese Army Today, 2nd ed. New York: Routledge

Blasko, D. J. (2021). The PLA Army After 'Below the Neck' Reforms: Contributing to China's Joint Warfighting, Deterrence, and MOOTW Posture. *Journal of Strategic Studies, 44*(2), 14-16.

Blasko, D. J., & Lee, R. (2019a, February 1). The Chinese Navy's Marine Corps, Part 1: Expansion and Reorganisation. *China Brief, 19*(3). https://jamestown.org/program/the-chinese-navys-marine-corps-part-1-expansion-and-reorganization/

Blasko, D. J., & Lee, R. (2019b, February 15). The Chinese Navy's Marine Corps, Part 2: Chain-of-Command Reforms and Evolving Training. *China Brief, 19*(4). The Chinese Navy's Marine Corps, Part 2: Chain-of-Command Reforms and Evolving Training - Jamestown

Brunnstrom, D., & Pamuk, H. (2020, June 22). U.S. Designates Four Major Chinese Media Outlets as Foreign Missions. *Reuters*. https://www.reuters.com/article/us-usa-china-media-restrictions/u-s-designates-four-major-chinese-media-outlets-as-foreign-missions-idUSKBN23T2Y8

CCTV. (2017, August 16). A Certain Brigade of the 73rd GA: Amphibious Armoured Forces Landed on the Beach. *CCTV*. http://tv.cctv.com/2017/08/16/VIDEvueFwKEGYsl7XPqQXrwN170816.shtml

CCTV. (2018, April 20). A Certain Brigade of the 74th GA: Amphibious Combat Vehicles Float and Fire on the Waves", *CCTV*. http://tv.cctv.com/2018/04/20/VIDE3EEV6vHkzlUPU2O1X8zI180420.shtml

CCTV. (2019, November 23). Amphibious Armoured Unit. *CCTV*. http://tv.cctv.com/2019/11/23/VIDEdRpPB5An13Wx2GN2EECM191123.shtml

CCTV. (2020a, January 8). China-Pakistan 'Sea Guardian-2020' Maritime Exercise: Fighting Side-by-Side, Chinese and Pakistani Marines Train Together. *CCTV*. http://tv.cctv.com/2020/01/08/VIDEZ6xPH4OgIs3phJHWIqqJ200108.shtml

CCTV. (2020b, October 14). Under the Guidance of Xi Jinping's Thoughts on Socialism with Chinese Characteristics, New Era, New Methods, New Chapter, Forging a Powerful Force that Can Quickly Respond to All Areas. *CCTV*. https://www.airuniversity.af.edu/Portals/10/CASI/documents/Translations/2023-10-30%20ITOW%20Xi%20Jinping%20Thought%20on%20Socialism%20with%20Chinese%20Characteristics%20for%20a%20New%20Era.pdf.

CCTV. (2020c, July 12). Direct Fire Training Range—The Marine Corps Kicked Off with a 'Good Start' with Live Firing and New Equipment. *CCTV*. https://tv.cctv.com/2020/07/12/VIDEw5Cg3mFAHPCKwmcvRCoi200712.shtml

Chen, J. (2019). "Choosing the 'Least Bad Option': Organisational Interests and Change in the PLA Ground Forces," in *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, ed. Phillip C. Saunders et al. Washington, DC: National Defence University Press

China Army. (2019, January 16). Jane's Sentinel Security Assessment: China Army. The 72nd and 74th Group Armies either split their Engineer and Chemical Defence Brigades into two separate brigades.

China Army. (2020, September 22). Jane's Sentinel Security Assessment. *China and Northeast Asia: China Army*. https://customer.janes.com/Janes/Display/JWARA133-CNA

China Military Online. (2019, January 16). A 72nd Group Army Engineer Brigade Took the Initiative to Solve Grassroots Problems. *China Military Online.* http://www.81.cn/jfjbmap/content/2019-01/16/content_225391.htm%3E

China Military TV Online. (2020a, June 2). A Certain Heavy Amphibious Combined Arms Brigade of the 73rd Group Army Organized a Live Fire Test at Sea. *China Military TV Online.* http://www.js7tv.cn/video/202006_218933.html;

China Military TV Online. (2020b, November 23). A Certain PLANMC Brigade: Implement the Spirit of the Plenary Session and Strive to be a Pioneer in Transformation. *China Military TV Online.* http://www.js7tv.cn/video/202011_234913.html

China Military TV Online. (2020c, August 29). Amphibious Armoured Equipment Is Full of Firepower—A Live Fire Drill Afloat at Sea. *China Military TV Online.* http://www.js7tv.cn/video/202008_227937.html

China Military TV Online. (2020d, September 18). Amphibious Reconnaissance Vehicle Launches First Drone at Sea. *China Military TV Online.* http://tv.81.cn/jbmdm/2020-09/18/content_9875313.htm

China Military TV Online. (2020e, August 8, 2020). Service Arms Coordinate a Three-Dimensional Offense and Defense to Forge an Amphibious Combat Force. *China Military TV Online*.

Chongling, Z. (2019, November 7). More than 800 Days After Birth: The Growth of the Service Support Battalion. *China Military Online*. http://www.81.cn/lj/2019-11/07/content_9670563.htm

Cina Navy. (2020, October 19). Jane's Sentinel Security Assessment: China and Northeast Asia: *China Navy*. https://customer.janes.com/Janes/Display/JWNA0034-CNA

Conor, K. (2021). China Maritime Report No. 15: The New Chinese Marine Corps: A "Strategic Dagger" in a Cross-Strait Invasion. *CMSI China Maritime Reports, 15*. https://digital-commons.usnwc.edu/cmsi-maritime-reports/15

Delin, W., Xu, F., & Junye, Z. (2019). Army Combined Arms Battalion Staff Officer Training. *National Defence Technolog, 40*(2), 104.

Faxin, L. (2013). *The Chinese PLA Navy Marine Corps*. Beijing: Wuzhou Communications

Feng, Z., Qunsheng, Z., & Zijian, C. (2018). Research on the Construction of Army Force Projection Capability. Journal of Military Transportation University, 20(5), 4.

Guoquan, C. & Haoyu, W. (2020, May 5). The Marine Corps Builds a Multi-Dimensional Integrated New-Type Combat Force. *Xinhua*. http://www.xinhuanet.com/2020-05/05/c_1210604164.htm

Hui, W., Liu Jun, L., & Guanghe, J. (2019). Research on Landing Operations, Amphibious Armoured Equipment, and Combat Damage. *Journal of Military Transportation University, 21*(10), 45.

Janes. (2020a, October 8). Jane's Land Warfare Platforms: Armoured Fighting Vehicles Type 05, ZBD-05, ZTD-05, PLZ-07B. *Janes*. https://customer.janes.com/Janes/Display/JAA_A071-JAFV

Janes. (2020b, October 20) Jane's Land Warfare Platforms: Armoured Fighting Vehicles Type 09; ZBL-09, VN1. *Janes*. https://customer.janes.com/Janes/Display/JAA_A095-JAFV

Janes. (2020c, August 26). Jane's Land Warfare Platforms: Armoured Fighting Vehicles—Type 63, Type 77. *Janes*. https://customer.janes.com/Janes/Display/JAA_1272-JAFV

Janes. (2020d, September 7). Jane's Land Warfare Platforms: Artillery and Air Defence-Type 89 (40 Round) 122mm. *Janes*. https://customer.janes.com/Janes/Display/JAA_0588-JAAD

Jianwei, L., & Ning, Z. (2020, May 11). Pay Attention to the Construction of the Army Combined Arms Battalion: 1 + 1 > 2, Combat Power Integration Is the Ultimate Goal! *China Youth Daily Online*. http://military.china.com.cn/2020-05/11/content_76029419.htm

Jiaqing, Z., Xu, Z., & Shaokai, Z. (2019). Raptors' Cross the Sea—A Record of the Shenyang Joint Logistic Support Center's Cross-Sea Projection Exercise Jointly Held with a Shipping Company. *PLA Pictorial, 8,* 84-87.

Joe, R. (2019, July 17). The Future of China's Amphibious Assault Fleet. *The Diplomat*. https://thediplomat.com/2019/07/the-future-of-chinas-amphibious-assault-fleet/

Kamphausen, R., Lai, D., & Tanner, T. (2012). Learning by Doing- the PLA trains at home and abroad. *The US Army War College*. https://apps.dtic.mil/dtic/tr/fulltext/u2/a570772.pdf

Kubec, J. (2023). Modernisation of the Chinese People's Liberation Army Navy in Xi Jinping's era: An Offensive Realist Perspective. *Palacký University Olomouc Master's Thesis*. https://theses.cz/id/4nh5tc/Kubec_-_Diploma_Thesis.pdf?cv=1

Lei, Z., & Jin, Z. (2017, November 25). Live-Fire Exercises Conducted by PLA Base in Djibouti. *China Daily*. https://www.chinadaily.com.cn/china/2017-11/25/content_34966883.htm

Magnier, M. (2020, September 17). U.S. Sending State Department Official Keith Krach to Taiwan for Lee Teng-hui Memorial Service. *South China Morning Post*. https://www.reuters.com/article/us-usa-china-media-restrictions/u-s-designates-four-major-chinese-media-outlets-as-foreign-missions-idUSKBN23T2Y8

Masafumi, I. (2022 September 27). The Current Status and Prospects of China's Growing Marine Corps. *NIDS.* https://www.nids.mod.go.jp/english/publication/commentary/pdf/commentary238e.pdf?cv=1

McCauley, K. (2018, February 26). Amphibious Operations: Lessons of Past Campaigns for Today's PLA. *China Brief, 18*(3). https://jamestown.org/program/amphibious-operations-lessons-past-campaigns-todays-pla/

Morris, J. L., Mazarr, M. J., Hornung, J. W., Pezard, S., Binnendijk, A., & Kepe, M. (2019, June 27). Gaining Competitive Advantage in the Grey Zone. *RAND, 8.* 30-31. https://www.rand.org/pubs/research_reports/RR2942.html

OSD. (2019). *Military and Security Developments Involving the People's Republic of China. Annual Report to Congress*. Washington, DC: Office of the Secretary of Defence

OSD. (2020). *Military and Security Developments Involving the People's Republic of China; Annual Report to Congress*. Washington, DC: Office of the Secretary of Defence

Panyue, H. (2017, August 29). Marines Rush Enemy Positions in Amphibious Raid Rehearsal. *China Military Online*

Panyue, H. (2019, May 13). Chinese-Thai Marines Conduct Joint Beach-Landing Operation. *China Military Online*. http://eng.chinamil.com.cn/view/2019-05/13/content_9502155.htm

Ping, L., & Wang, L. (2009). *Army Combined Arms Tactics Under Informationized Conditions*. Beijing: PLA Press

Ping, X. (2020, March 23). What Is the Combined Arms Battalion? Do You Understand the Organization of the Battalion in the Service? *China Military Online.* http://www.chinamil.com.cn/theory/2020-03/23/content_9775313.htm.

PLA Daily. (2017, September 26). How Is the Amphibious Steel Powerhouse Forged? It's Blown from a Trumpet. *PLA Daily*. http://0.0.0.81/cn/lj/2017-09/26/content_7769137_2.htm;

PLA Daily. (2018, October 2). Amphibious Operations, No Longer the Way You Think. *PLA Daily*. http://www.81.cn/jmywyl/2018-10/02/content_9302793.htm

Qian, H., & Hongqi, W. (2019). Amphibious Heavy Combined Arms Brigade Landing Operations Logistics Support. *National Defence Technology, 40*(3), 91-92.

Roth, N. L. (2025, July 22). PLA Modernising Amphibious Combined Arms Brigades for Joint Island Landing Campaign. *Red Diamond*. https://oe.tradoc.army.mil/product/pla-modernizing-amphibious-combined-arms-brigades-for-joint-island-landing-campaign/

Shichun, W. (2018, August 18). The Maritime Transport Squadron of an Eastern Theater Army Coastal Defense Brigade Recently Launched a Landing Training Event with the Army. *The Observer Online*. https://www.guancha.cn/military-affairs/2018_08_18_468639.shtml?web

Shishui, Z. (2019, March 17). Energetic Barracks: Our New Way of Doing Things Between Classes. *China Military Online.* http://www.81.cn/jfjbmap/content/2019-03/17/content_229430.htm

Shuoyang, Z., & Huihuang, Y. (2019, February 26). A 72nd Group Army Chemical Defence Brigade Conducts Actual Realistic Combat Training. China Military Online. http://www.81.cn/jwgz/2019-02/26/content_9434416.htm

Simpler, D. (1974, January 21). Saigon Says Chinese Control Islands, But Refuses to Admit Complete Defeat. *New York Times*. https://www.nytimes.com/1974/01/21/archives/saigon-says-chinese-control-islands-but-refuses-to-admit-complete.html

Sina Military. (2016, September 2). In Depth: China Built the World's Strongest Amphibious Assault Units with over 1,000 Combat Vehicles. *Sina Military*. https://mil/sina.cn/sd/2016-09-02/detail-ifxvqcts9244954.d.html

Sina News. (2019, September 20). The Amphibious Armoured Vehicle Carries a MANPADS Operator for Mobile Surface-to-Air Firing. *Sina News*.

Sina Weibo. (2020, October 14). PLAN Official Weibo Microblog; Amphibious Elite South China Sea Three Dimensional Assault. *Sina Weibo*. https://m.weibo.cn/detail/4559944038222402

Sohu. (2019, July 18). 112 Tanks + 112 IFVs, the PLA's Heavy Combined Arms Brigade Crushes Similar Elements in the U.S. and Russia. *112*, *Sohu*. https://new.qq.com/omn/20190718/20190718A0MBHH00.html

We Chat. (2019, July 9). Eastern Theatre Command Official WeChat Microblog. Day and Night: External Training, the Smell of Soldiers!" *WeChat*.

We Chat. (2020, October 17). People's Navy Official WeChat Microblog. Marine Corps, You're So Handsome! *WeChat.* https://mp.weixin/qq.com/s/vSJZCcNaZcjkp2iisvwaEQ

Wei, L., Yang, Q., & Hongkun, L. (2012). The Analysis of the Amphibious Tank Company's Aquatic Thermodynamic Power Support Action on the System Dynamics. *Fire Control and Command Control 37*(2), 6.

Xi, P. (2019, May 19). China's 18th Batch of Peacekeeping Construction Engineer Elements Set Off to Lebanon. *China Military Online*. http://www.81.cn/jwgz/2019-05/19/content_9507014.htm

Xiaosong, S. (Ed.). (2013). *Science of Military Strategy*. Beijing: Military Science Press

Xin, S. (2019, September 9). Blade Warriors: Always Following Orders and Waiting for Peace. *China Military Online*. http://www.81.cn/tzjy/2019-09/09/content_9615797.htm.

Xuanzun, L. (2020a, March 22). Combined Arms Battalion Becomes Basic Combat Unit of PLA. *Global Times.* https://www.globaltimes.cn/content/1183390.shtml

Xuanzun, L. (2020b, Ocotober 12). PLA Holds Amphibious Landing Drills to Show Firm Will Against Taiwan Secessionists. *Global Times.* https://www.globaltimes.cn/content/1203126.shtml

Xuhang, Z., Weiqing, W., & Ruiqing, Q. (2019, December 18). From Establishing Combined Arms to Combat Power Integration—The Combined Arms Battalion 'Asks for Directions' to the Beachhead. *China Military Online*. http://www.chinamil.com.cn/lj/2019-12/18/content_9699027.htm

Yafeng, C. (2009). Science of Army Operations. Beijing: PLA Press

Yan, Z., Wenbin, S., & Ruichen, P. (2018). Transformation: How Did a Certain Marine Brigade Start This Must-Win Battle Without Gunpowder? *China Military Online*. http://www.81.cn/syjdt/2018-06/07/content_8055360.htm

Yi, X. (2019, July 25). PLA Teams Complete Preparations for IAG 2019. *China Military Online*. http://eng.chinamil.com.cn/view/2019-07/25/content_9567870.htm

Yinggui, Z., Su, L., & Jianjiang, Z. (2008). Application of Fire to the Amphibious Tank Elements in the Phase of Assault Landing. *Fire Control and Command Control 33*(2), 57-58.

Yu, L. (2018, August 11). Seaborne Assault Concluded in China. *Xinhua.* http://www.xinhuanet.com/english/2018-08/11/c_137383614.htm

Zhuowu, P., Yangdi, S., & Huaikun, L. (2020, August 16). Integrated into the System, Open Up the Channels. This Operational Support Battalion Makes a Fist. *PLA Daily*. http://www.81.cn/jmywyl/2020-08/16/content_9882860.htm

Zihao, L. (2019). Research on Problems with Army Combined Arms Brigade Logistics Support. *National Defence Technology*, *40*(1), 115-117.