TAKSHASHILA INSTITUTION

Takshashila Strategic Assessment

Impact of COVID-19 on the Chinese Armed Forces

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Executive Summary

This assessment examines the impact of the COVID-19 outbreak on the Chinese People's Liberation Army (PLA). We argue that:

- Claims of zero COVID-19 infections in the PLA do not stand up to scrutiny.
- The outbreak has had a limited, short-term impact on China's defence industry and armed forces recruitment. Long-term impacts will depend upon China's economic recovery.
- The PLA's aggressive maritime posturing amid the global pandemic is likely to prove counterproductive in the long run.

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What is the PLA's role?

The PLA played a prominent role in the Chinese government's effort to deal with the COVID-19 outbreak. Starting late January, thousands of PLA medics were deployed on the frontlines in the city of Wuhan and the wider Hubei province. A large number of other troops aided in infrastructure building and provision of essential supplies. PLA deployments were a key part of Xi Jinping's policy of launching a "People's War" against the disease. This was underscored during Xi's visit to Wuhan, during which he engaged with the staff at the military-run Huoshenshan Hospital. The hospital's political commissar Colonel Yuan Hua later argued that the outbreak had provided a testing ground for the PLA's emergency preparedness and joint support and logistics capabilities.

Infection Estimation

In this effort, however, the PLA is not unique. A number of States have mobilised their armed forces to assist in relief measures amid the global pandemic. What is, however, unique is the government's insistence that not a single PLA member had contracted the infection. In a press conference on March 3, 2020, Major General Chen Jingyuan, head of the Central Military Commission (CMC) Logistics Support Department's health bureau, claimed that the outbreak had not led to any cases of infection among the military medics and service members. A number of factors undermine this claim.

First, it is reminiscent of Beijing's denial of infections among PLA personnel during the 2003 SARS outbreak. Those claims were later debunked by the World Health Organisation (WHO), which estimated that approximately 8 per cent of all SARS cases reported in China were among military personnel.

Second, it is evident that the COVID-19 virus is much more infectious than the SARS virus of 2003. Even if the Personal Protective Equipment available to the personnel is better in 2020, the spread of infections is much more. Moreover, the number of PLA personnel deployed in 2019 to deal with the outbreak were also far higher than those deployed in 2003. Back then, the CMC deployed 1,200 military medics, besides militia members and other PLA personnel. In the current outbreak, reports indicate that around 6000 to 7000 PLA members and nearly 5,60,000 militia members, including the People's Armed Police (PAP) personnel, were deployed in and around Hubei province. Among these, at least 4000 were PLA medics, who were responsible

for aiding epidemic control efforts. With such numbers, there is clearly a greater probability of infections among these individuals.

Data from Italy and Spain - two countries that have been severely affected - show that the infection rate within the civilian medical community is high. For instance, in late March, it was reported that infections among healthcare workers accounted for 8.3 percent of Italy's total caseload. The corresponding number in Spain at the time was around 14 percent. This number is much higher in the worst-hit areas.

Across China, this rate, as per a mid-February study by the China Centre for Disease Control, is merely 4.17 per cent i.e., roughly over 3,019 infections. A bulk of these, 87.3 per cent of cases, were reported from Wuhan and around Hubei. This means that roughly 2636 civilian medical personnel in Wuhan and Hubei had been infected. According to Chinese media reports, around 122,000 civilian medical workers from around the country were deployed in Hubei to deal with the outbreak. This implies an infection rate of 2.16 per cent among all medical workers deployed in the province.

Assuming that PLA medics were working in similar conditions, with similar equipment and following similar safeguards and protocols as civilian health workers, it is likely that at the very least the infection rate among them was also similar. This means that if 4,000 PLA medics were deployed in Hubei, then at the very least 86 of them would have been infected.

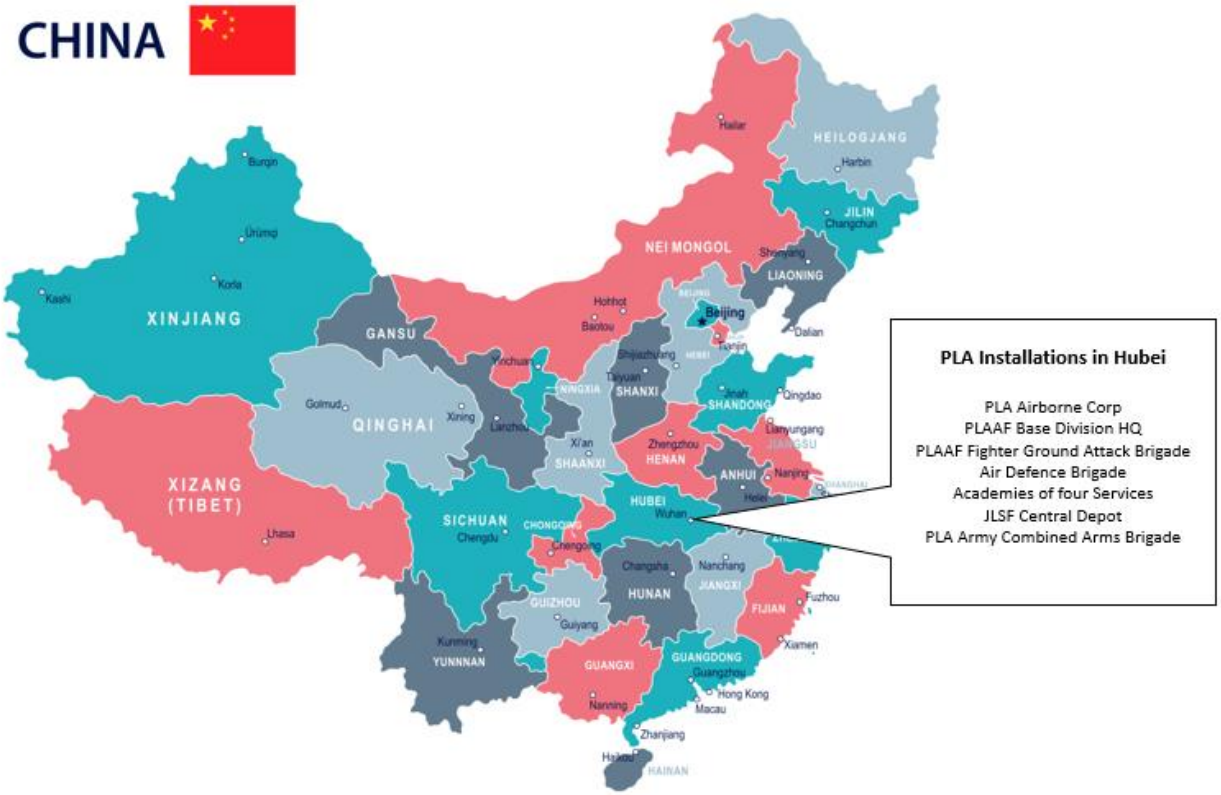
It is important to note that this figure does not include PLA and PAP personnel deployed to provide logistical support. Also excluded from this estimation are personnel present at multiple PLA facilities in Wuhan, Hubei and other provinces. For instance, there was a report of new pneumonia in the PLA's Airborne Corps in Xiaogan, Hubei, on January 25. Over 200 active-duty soldiers were reportedly isolated in an empty military hangar the next day. The same report also claimed that the infections in the submarine unit in Sanya led to the isolation of 300 naval personnel. Other reports pointed to suspected infections among members of the PAP and Rocket Force University of Engineering as well as the crew on the Shandong aircraft carrier. While it is not possible to account for these numbers, they are indicative of a larger and unreported outbreak among the ranks of the PLA.

Table 1: Date wise PLA deployment in Wuhan and Hubei

Date	Deployment	No of Personnel
Jan-25	PRC deploys PLA in Hubei	
Jan-25	Three teams from the PLA A, PLA AF and PLAN military medical universities left for Wuhan	150 each
Jan-31	Female nurses from navy military medical University left for Wuhan	150
Feb-02	More PLA medics deployed in Wuhan	950
Feb-03	Experts from PLA's Centre for Disease Control and Prevention & Academy of Military Medical Sciences selected to visit hospitals in Wuhan	15
Feb-04	JLSF support team used for transport, logistics and distribution of essential and medical goods	300
Feb-05	PLA AF undertakes logistic support	400
Feb-07	PLA General hospital dispatches medic and nursing staff for support tasks	100
Feb-11	Retired personnel from the department of retired military affair deployed	40
Feb-12	Xi approves deployment of another batch of medics	2600
Feb-16	More military troops deployed with the help of PLA JLSF and AF	1400
Feb-29	A PLA Daily article claims a massive deployment of militiamen in Hubei till Feb 29	5,60,000

Source: Compiled from multiple news reports: The PLA Daily, PLAN News, SCMP

Figure 1: Major PLA Installations in Hubei



Source: Compiled from multiple sources.

Impact on Defence Manufacturing

Lockdowns imposed across different parts of China adversely impacted defence manufacturing. A report indicates that a number of key companies suspended their operations amid the outbreak. As depicted in the Figure 2[1] below, the PLA Air Force and PLA Navy will bear the brunt of these policies.

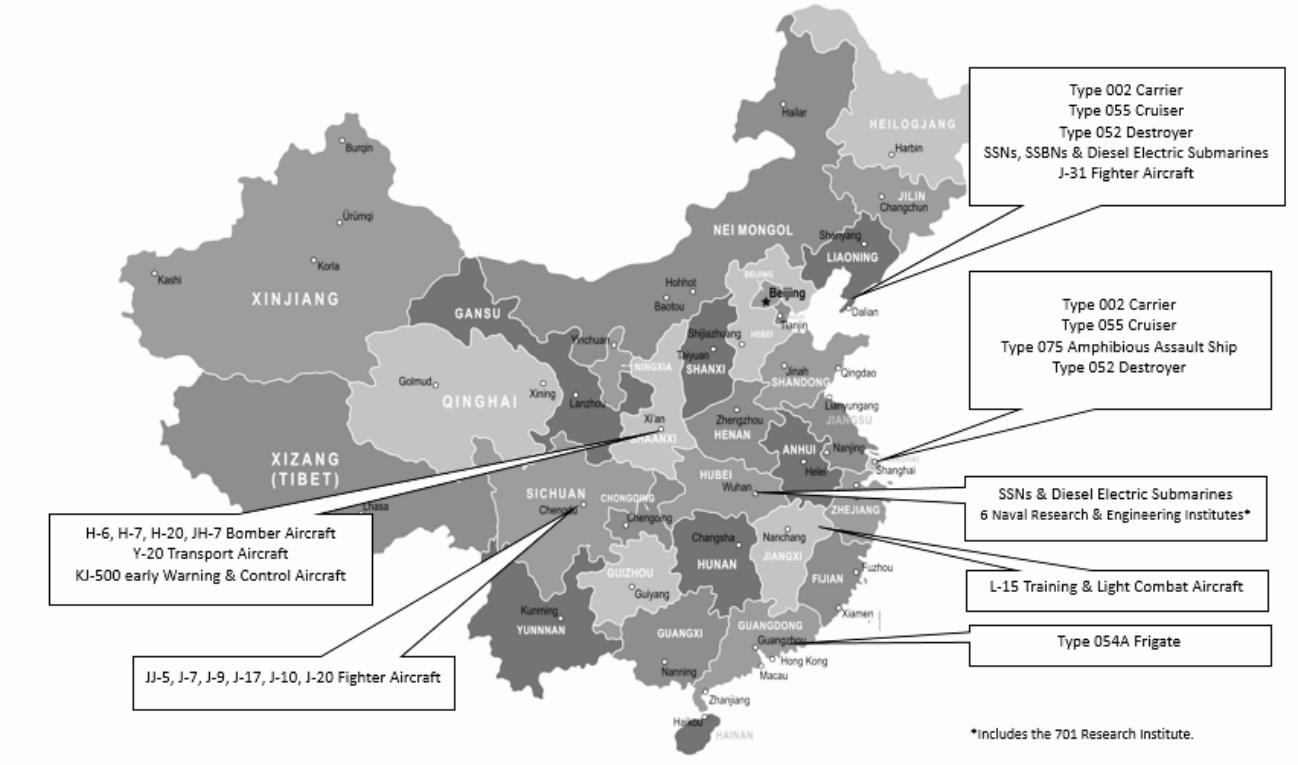
A Chinese news report claims that some of these companies gradually resumed work starting from mid-February. For instance, reports inform us that the Jiangnan Shipyard (Group) Co. Ltd, China's largest and oldest shipbuilding base, extended Lunar New Year holidays by a week. In addition, an advisory was issued, asking workers who travelled during the holidays to work from home for the next 14 days. Jiangnan is where the work on China's next aircraft carrier, Type 002, is currently

[1] Find a detailed table on China's major defence production units and impact of Covid-19 on them in Appendix 1.

being carried out, along with the development of the advanced Type 055 destroyers. The shutdown would have pushed back timelines for these vessels.

Similarly, Wuhan, the epicentre of the outbreak in China, is the cradle of Chinese naval shipbuilding. Key Chinese naval research institutes are located at Wuhan, as is China Shipbuilding Industry Corporation's (CSIC) Wuchang Shipyard. The 76-days shutdown in Wuhan would have certainly impacted these installations. Also facing shutdowns were key shipyards run by CSIC subsidiaries in Liaoning, which are critical to PLAN's submarine development programme. On an average, the PLAN commissions three submarines each year. One can estimate that this rate could dip this year.

Figure 2: PRC's major military manufacturing companies and their products



Source: *Compiled from multiple sources.*

Moreover, in the case of a prolonged economic slowdown, new equipment development is likely to be further strained. The IMF projects that China's growth will slow down to 1.2 per cent in 2020, rebounding rapidly in 2021. In this scenario,

new equipment manufacturing should recover after temporary delays. But a prolonged slowdown, which could result from a second wave of infections, demand side shocks, and a drift towards de-globalisation, will force a reassessment. In this scenario, more capital is likely to be directed towards maintaining existing equipment than for procurement. In other words, the commissioning of newer equipment for all the services is likely to slow down as maintaining the machinery would, most likely, be given priority.

Impact on Recruitment

The PLA was scheduled to shift from an annual to a twice-a-year conscription model in January 2020. Under this system, new recruits were to join the PLA on March 1 and September 1 each year. However, this process had to be pushed back following the COVID-19 outbreak.

This change in conscription was implemented owing to concerns over annual reduction of combat power. Estimates show that the PLA requires around 4,50,000 conscripts every year to compensate for the 15 percent gap created due to its attrition rate. Under the previous model, implemented in 2013, conscription began in August every year in sync with university graduation. Thereafter, recruits underwent basic training till December, followed by advanced training, which culminates in May, in order to be deemed ready. Consequently, overall combat power was viewed as falling from September to December, before gradually recovering.

A recent report suggests that there will now be only one round of conscription this year. It remains to be seen if this has an impact on the total number of recruits that were originally planned. But what is clear is that at least for this year, the PLA will continue to have to contend with the limitations on combat power as earlier.

On the flip side, there is a possibility that the broader economic slowdown and rise in unemployment in China owing to the pandemic, could have some benefits for the PLA. As the modernisation and mechanisation of the Chinese armed forces have progressed, there's been growing concern about the need to recruit high-quality manpower. This is particularly the case with regard to the PLAAF, PLAN and PLA Rocket Force. For instance, a recent report indicates that a carrier-pilot shortage is affecting fleet expansion plans. In its effort to attract younger and more educated recruits, the PLA has had to compete with China's thriving private sector. An

economic downturn impacting economic opportunities, pay scales and job security in the private sector could make the PLA an attractive option for young and educated Chinese.

Training and Posturing

Meanwhile, when it comes to training, the outbreak has had a mixed impact. While exercises with foreign forces have reduced, the PLA has been far more aggressive in its maritime neighbourhood.

The frequency of the PLA's bilateral and multilateral drills have fallen drastically from January onwards. The PLA participated in only two bilateral military exercises in January 2020 and only one each in February and March 2020. Drills with foreign forces enable personnel development, intelligence gathering, equipment testing and familiarisation with unfamiliar geographies. All of these are essential for a rapidly modernising force that lacks combat experience.

With that said, there has been a marked shift in China's posture in its near seas as the outbreak in China has eased and the epicentre of the pandemic shifted towards the West. Since January, Chinese forces have conducted multiple day and night-time drills near Taiwan. In early March, PLAN and PLAAF conducted a joint drill simulating face-to-face encounters with invading foreign aircraft and warships in the South China Sea. This took place around the time the USS McCampbell, a guided-missile destroyer, carried out the second US Freedom of Navigation Operation for the year.

Towards the end of the month, a Chinese fishing boat collided with a Japanese destroyer in the East China Sea. The Chinese Foreign Ministry asserted that the incident took place in Chinese coastal waters, urging cooperation in "preventing an incident like this from happening again." A few days later, another Chinese vessel rammed into a Vietnamese boat in the South China Sea, sinking the Vietnamese vessel. That was followed by the Chinese Haiyang Dizhi 8 survey vessel returning to waters near Vietnam. This prompted Hanoi to dispatch three vessels to track the Chinese survey ship. Subsequently, Haiyang Dizhi 8 veered off south towards Malaysia.

Responding to Beijing's actions, the US State Department issued a strongly-worded statement on April 6. It said: "Since the outbreak of the global pandemic, Beijing has also announced new 'research stations' on military bases it built on Fiery Cross Reef

and Subi Reef, and landed special military aircraft on Fiery Cross Reef. The PRC has also continued to deploy maritime militia around the Spratly Islands...We call on the PRC to remain focused on supporting international efforts to combat the global pandemic, and to stop exploiting the distraction or vulnerability of other states to expand its unlawful claims in the South China Sea."

Table 2: PLA's military exercises and drills

Month-Year	PLA's Drills & Exercises
Nov-19	China-Saudi Arabia Blue Sword Naval Exercises
	ADMM Plus Joint Counter Terrorism Exercise
	Trilateral Naval Exercise (South Africa-Russia-China)
Dec-19	China-Pakistan Warrior VII Exercises
	India-China Joint Military Exercises at Umroi, Meghalaya
	SCO anti-terrorism online exercises
	China-Russia-Iran Joint Naval Exercises
	China-Tanzania Joint Military Training
Jan-20	China-Pakistan Sea Guardian Joint Naval Exercises
	China-Philippines Joint Coastguard Exercises
Feb-20	Cobra-Gold 2020 Exercises
Mar-20	China- Cambodia Golden Dragon Joint Military Exercises

Source: Compiled from multiple sources.

Apart from these frictions with claimants in the South China Sea, the PLA has also focussed on activities in the Western Pacific. For instance, late in February, the US Pacific Fleet said that a PLAN destroyer had directed lasers at a US Navy P-8A Poseidon maritime patrol aircraft on February 17 while flying in airspace above international waters approximately 380 miles west of Guam. The incident apparently took place at a time when PLAN vessels were engaged in a 41-day exercise across the International Date Line. Chinese analysts argued that the drills showed PLAN's intention to go "deeper from now on into the central and eastern Pacific." In April, the Liaoning carrier strike group, which includes two destroyers, two frigates and a combat support ship, sailed through the Miyako Strait near Okinawa, northeast of Taiwan. Chinese media and experts have argued that this shows how in comparison to other forces, PLAN had "done a great job in the epidemic prevention and control work and COVID-19 epidemic has not had an impact on its deployment and operations."

Conclusion

Summarising the above, based on our assessment we can argue that:

1. The official claim about zero COVID-19 infections among the PLA's ranks does not stand scrutiny. At the bare minimum, the PLA would have experienced around 80 confirmed cases among its medical staff. This number will be much higher if one were to include installations that are located in Hubei. However, opacity in reporting prevents a clear estimation.

2. The COVID-19 outbreak has led to short-term disruptions in PLA recruitment and equipment manufacturing timelines. However, there could be long-term implications if China faces a prolonged economic slowdown. In this scenario, new equipment manufacturing is likely to be strained, with more capital being used to maintain existing equipment. In terms of recruitment, a slowdown could bring positive outcomes, potentially enhancing the PLA's competitiveness as an employer.

3. With Western powers focussed on dealing with the Covid-19 outbreak at home, the PLA appears to have sensed an opportunity to press its maritime claims, browbeating smaller states in the region. This aggressive posturing is

likely to be useful for domestic propaganda purposes and support Beijing's claims of having contained the outbreak. However, it might prove to be a long-term strategic mistake. The PLA's aggression could undermine the South China Sea Code of Conduct negotiations, forcing regional states to pursue greater balancing by deepening engagement with the US.

Appendix 1

PRC's major military manufacturing companies and their products

Companies	Shipyards/Manufacturing Units/ Research Institutes	Location	Product	Status
Jiangnan Shipyard (Group) Co. Ltd	Jiangnan Changxing Shipyard	Shanghai	Type 002 Carrier, Type 055 Cruiser	Lockdown
China Shipbuilding Industry Cooperation	Dalian Shipyard	Dalian, Liaoning	Type 055, Type 052 destroyer, SSNs, Diesel electrics	Lockdown
China Shipbuilding Industry Cooperation	Hudong-Zhonghua Shipbuilding	Shanghai	Type 052, Type 075 amphibious assault ships	Lockdown
Guangzhou Wenchong Shipyard Co. Ltd.	Guangzhou Wenchong Shipyard	Huangpu, Guangzhou	Type 054A Frigate	Lockdown
China Shipbuilding Industry Cooperation	Bohai Shipyard	Huludao port, Liaoning	SSBNs	Lockdown
China Shipbuilding Industry Cooperation	Wuchang Shipyard	Wuhan	SSNs, Diesel electrics	Lockdown
AVIC's Chengdu Aircraft Industry Group	Design plant, manufacturing unit, research institute	Chengdu, Sichuan	JJ-5, J-7, J-9, J-17, J-10, J-20	Lockdown
Xi'an Aircraft Industrial Corporation	Manufacturing units	Xi'an, Shaanxi	H-6, H-7, JH-7, H-20, Y-20	Lockdown
AVIC's Shaanxi Aircraft Industry Corporation Ltd	Manufacturing units	Xi'an, Shaanxi	KJ-500	Lockdown
AVIC's Hongdu Aviation Industry Group	Manufacturing units	Nanchang, Jiangxi	L-15	Lockdown
AVIC's Shenyang Aircraft Company Ltd	Manufacturing units	Shenyang, Liaoning	J-31	Lockdown
China Shipbuilding Industry Cooperation (Including 701 Research Institute)	Six naval institutes	Wuhan	Research on advanced naval technology	Lockdown

Source: Compiled from multiple sources.