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ASSESSING PAKISTAN'S NAVAL MODERNISATION AND ITS IMPLICATIONS FOR INDIA

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China's advancements in the Indian Ocean region have continued apace over the past ten years, but Pakistan's dedicated modernisation plans for its navy have largely been overlooked by the security experts. To the great unexpectedness of India and other states, Pakistan has managed to maintain a modernisation program for its navy despite the escalating economic downturn.

To add to the calculations, Beijing has stepped up its support for Pakistan's navy modernisation. The building of Gwadar port and the ongoing modernisation of the Pakistan navy will support the Chinese navy's presence throughout the Indian Ocean and the Arabian Sea in addition to being a part of China-Pakistan cooperation to protect Belt and Road Initiative Sea routes. With the Indian Ocean serving as the strategic gateway to the Atlantic and Pacific Oceans in terms of oil shipping, China may be able to patrol sea lanes and keep an eye on American naval patrols with the help of a modern naval force of Pakistan. The brief attempts to analyse and scrutinise the operational implications of the rapid modernisation of the Pakistan Navy.

Pakistan Naval Modernisation

Pakistan's navy has always been overshadowed by the demands of the army. It has historically received lesser funds than other wings of the military. It was subsequently structured as a defensive force to protect the interests of the nation against seaborne aggression with a dozen-odd ships armed with rudimentary systems. But the situation has started to change rapidly in the last decade. A naval officer asserts that maritime modernisation initiatives are proceeding as planned despite the country's depreciating

currency and political crisis.

The guided-missile frigate Tughril, the Pakistan Navy's most sophisticated vessel, was put into service in January 2022. The Pakistan Navy is going to have four strong Type 054A/P frigates built in Shanghai, the first of which is called Tughril. Equipped with both surface-to-air and supersonic surface-to-surface missiles (SSMs), the battleship is flexible and prepared to carry out several missions. In June 2022, Taimur, the second of these ships, was put into service. The HHQ-16 surface-to-air missile systems and P-282/CM-401 supersonic anti-ship weapons on the ships are designed to counter the threat posed by India's BrahMos supersonic anti-ship missiles, and expanding carrier capabilities. Pakistan plans to acquire two additional frigates of the same design in the upcoming years, which the navy regards as force multipliers. These frigates have, however, had several difficulties, such as malfunctioning engines, poor imaging equipment, radar issues, and other technological difficulties.

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The Tughril-class frigates are a noteworthy improvement on Pakistan's surface force, although their inferior strength and capability cannot effectively match the Indian Navy. Nonetheless, India must keep an eye on Pakistan's move toward projecting strength beyond the Indian Ocean. The Pakistan military can now operate in far-off waters, thanks to the arrival of these advanced frigates, as evidenced by the capability to carry out joint drills with China's military in the East China Sea.

Pakistan is slated to get three out of four Babur-class corvettes, the fourth one is undergoing construction. These corvettes are fitted with multiple systems and are ready to enhance Pakistan's maritime capabilities. At the same time, the Pakistan Navy's ship design team is finalising the improvement of the related Jinnah-class frigate in collaboration with Turkish colleagues. The six projected naval vessels will be built when the Babur-class corvettes are completed at Pakistan's state-owned Karachi Shipyard and Engineering Works. The Jinnah frigates are slated to be delivered over the following five years. Although this is Pakistan's largest indigenous warship program to date, indigenous sector contribution is limited to specific onboard systems, and steel manufacturing is not going to take place in Pakistan.

In addition, the Navy has increased its attempts to acquire and advance unmanned technologies. Islamabad recently bought the Chinese CH-4, a medium-altitude, long-endurance combat drone, and efforts to create remotely operated and autonomous surface and underwater vehicles are ongoing at home. The F-22P frigate's interim upgrade is projected to increase the Navy's observation, air defence, anti-submarine, and offensive

anti-ship capabilities. Although new sensor and weaponry specifics are unknown, the ships will include an indigenous marine battle management system. However, concerns have been raised about the efficiency of air defence technologies and sub-hunting capabilities. The current air defence package includes an FM-90N surface-to-air missile launcher with an eight-round firing arc.

In 2021, the country selected Paramount Group to integrate systems into the Embraer Lineage 1000 aircraft for the program. In June 2022, one of these planes was photographed in South Africa and was noticed taking off over the Wonderboom area in the capital Pretoria. Paramount Group's aerospace division has its headquarters at Wonderboom National Airport, where the company additionally operates an aerospace training academy.

Pakistan has been actively acquiring high-tech naval warships from China. The most notable agreement, which was inked in 2016, was for Pakistan to purchase Yuan class Type 039/041 diesel submarines from China by 2028 for \$5 billion. Eight of these submarines are slated to be delivered to Pakistan by the end of the year 2023; the other four are already on order from China. China Shipbuilding Industry Corporation has developed the first four submarines. Karachi Shipyard and Engineering Works will build the next four in Pakistan, thereby enhancing Pakistan's domestic capabilities. Considering these submarines have sophisticated sensors and contemporaneous weaponry, Pakistan is granted a small tactical advantage. The Pakistan Navy's offensive sea denial doctrine, which emphasises the deployment of submarines and missile-carrying maritime patrol aircraft in naval warfare, is in line with these diesel attack submarines.

The Operational Implications

At times, doctrine and strategy are used erroneously, confusing the two ideas. Although they are related, military practitioners and students need to know the distinctions between the two ideas to avoid confusing them. Strategy represents the creative aspect of warfare, while doctrine reflects the more scientific side. Doctrines are rarely sufficient to win the war; instead, military commanders achieve their goals by outwitting, defeating, or coercing their adversaries through the creative application of general peacetime doctrine to the strategic and operational context.

'Preserving Freedom of Seas', Pakistan's first formal maritime doctrine, went into effect in 2019 and highlights the necessity of combating terrorism, drug and human trafficking in open waters, and piracy, among other issues, both locally and globally. It also addresses some defence issues. The doctrine will have an impact on the Pakistani Navy's maritime strategy, which recently started to aim for an increased and sustained presence in the Indian Ocean, as opposed to staying entirely centred on coastal defence and sea denial during times of conflict. This is something that the Indian Navy needs to keep an eye on. Pakistan's naval force is shifting towards greater strength for projection

in the IOR with the periodic introduction of surface vessels of higher tonnage possessing the necessary capabilities.

The offensive sea denial approach of Pakistan's naval strategy has given way to one that is centred on ensuring a presence in the IOR. Despite its ambitious objectives, the Pakistan Navy has historically been a defensive force and will probably continue to be so for a long time to come. Pakistan's Navy can conduct maritime operations in the Arabian Sea and the Indian Ocean using the Chinese-made J-10 fighter, a component of China's naval force. The fighter craft's ability to launch

Beijing wants to maintain a strong presence in the IOR and sees Pakistan as an essential partner in achieving its geostrategic objectives in the Indian Ocean. China also views Pakistan as a helpful instrument to stop India's maritime influence from growing, with Pakistan being readily available to act as China's stand-in for India.

anti-ship missiles may allow the Pakistani Navy to respond more quickly to events in the Indian Ocean. The recent acquisition of Chinese-made frigates by the Pakistani Navy must be seen as a component of the overall plan for achieving the objectives stated in its doctrine. India must investigate the primary justification for China's military assistance to Pakistan. It is well known that Beijing wants to maintain a strong presence in the IOR and sees Pakistan as an essential partner in achieving its geostrategic objectives in the Indian Ocean. China also views Pakistan as a helpful instrument to stop India's maritime influence from growing, with Pakistan being readily available to act as China's stand-in for India.

The foundation of the Pakistan Navy's strategy will continue to depend on the improvement of its Anti-Area/Access-Denial (A2/AD) capabilities as it attempts to meet its declared objectives of safeguarding Pakistan's maritime goals, namely, deterring aggression at and from the sea, providing disaster relief, taking part in the development of coastal communities, and contributing to global initiatives to preserve peace and security at sea. Platforms like those from the Tughril-class can be aimed at restricting and throttling the offensive forces and denying them the freedom to move around.

Countries that are up against technologically sophisticated opponents favour the A2/AD strategy. The Pakistani Navy sees the stronger Indian Navy as an opponent whose influence, objectives, and goals in the Indian Ocean are directed towards turning into the dominant force in the region. The Pakistani Navy's announcement that the nation planned to grow the size of its surface fleet to over 50 ships, including 20 'major surface vessels' like frigates in October 2020, did not come as a surprise, so it was not surprising when Former Chief of Naval Staff, Admiral Zafar Mahmood Abbasi, revealed the development of the P282 anti-ship ballistic missile.

Conclusion

It could be interpreted that Pakistan's naval Modernisation is an effort to change the force from one pursuing an offensive sea-denial strategy to a navy aiming for greater power projection in the IOR through the recurrent introduction of heavier surface ships with the necessary capabilities. Currently, Pakistan cannot match India's maritime power, but with continued modernisation efforts and renewed strategic alliances with China and Turkey, the situation might shift. However, the mainstay of its strategy will still be to strengthen its A2/AD capabilities, using platforms like Tughril-class frigates, to constrain and delay the offensive forces and deny them operational freedom.

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