



# Making India's Sea Power Formidable and Future-Ready

SUDARSHAN SHRIKHANDE



# Making India's Sea Power Formidable and Future-Ready

SUDARSHAN SHRIKHANDE



#### **ABOUT THE AUTHOR**

**RADM Sudarshan Shrikhande** has served in numerous ships, staff and training assignments, and commanded three ships during his years of service. PG in ASW Weapon & Sonar Engg from the Soviet Naval War College; from DSSC, College of Naval Warfare and the US Naval War College where he graduated with highest distinction. As a flag officer, he has headed Naval Intelligence, been Chief of Staff/ SNC, and served in HQIDS, Strategic Forces Command. He teaches in various colleges on Navy strategy, operational art, and ethics, and also works in areas of cyber security and force structuring. He is pursuing his PhD at Mumbai University.

ISBN: 978-81-937564-1-6

## Making India's Sea Power Formidable and Future-Ready

#### **ABSTRACT**

China's growing interests, ambitions and military capabilities pose challenges for India. This paper examines China's maritime interests and the dynamics of Indian responses at the maritime operational levels. The paper examines opportunities to counter China in the IOR, as well as options for the Indian Navy in the South China Sea. At operational levels, the Navy may need to think differently about ASW, carrier operations and power projection, expeditionary capabilities as well as in space and cyber-warfare. In order to become formidable and future-ready, the Navy may have to think afresh about opportunity costs for force-structures that would be needed for greater effectiveness in likely future operational and tactical environments. The Indian Navy has been nurtured well and, when combined with agile force structuring, greater jointness, leveraging statecraft and maritime geography, it could become even more formidable and future-ready.

#### INTRODUCTION

In an incisive analysis titled 'Britain & The German Navy', written four years before the First World War, Alfred Thayer Mahan — the renowned naval historian — urged Britain to prepare for a challenge that seemed

1

inevitable. He asked Britain to be "unemotional, businesslike (in) recognition of facts, in their due proportions...to be followed by well-weighed measures corresponding to the exigency of the discernible future...neither over-confident, nor over-fearful, above all not agitated. Of such steadfast attitude, timeliness of precaution is an essential element. Postponement of precaution is the sure road to panic in emergency."

Mahan ends this paragraph by quoting an unnamed "English naval worthy of two centuries ago (who) aptly said, 'It is better to be afraid now than next summer when the French fleet will be in the Channel."

Much has been said over several summers about China, its growing global imprint and increased footprint in Asia and Africa. If Mahan were alive, what would he have said, about China and the Chinese Navy's involvement in the Indian Ocean? What would he say about the Indian Navy's (IN) "timeliness of precaution" or its readiness for summers to come? This paper outlines the possible strategic setting and competing maritime strategies<sup>3</sup> of India and China along the Indo-Pacific expanse, spanning the next few decades. On the basis of this examination, what would it take for China-perhaps with increasingly friendly, or vulnerable partner nations in the Indian Ocean Region (IOR) — to execute its strategies at the operational level in time of conflict? Some steps by China are already quite apparent. First, it has begun leveraging years of investment in improving its maritime geography through places and bases. Second, it is leveraging military reforms, ever more modern military hardware, joint military instruments and ongoing high-technology research and development (R&D). Third, it has begun to leverage the already considerable and steadily growing geopolitical and geoeconomic influence and investments in the IOR to be part of its maritime military-strategic and military operational effectiveness.

Considered together, their contribution to the overall effectiveness of Chinese statecraft is already significant and growing steadily.

Correspondingly, therefore, what would be the effects of current maritime strategies of India and likely extrapolation into the future on the joint as well as maritime operational levels of warfare? In turn, this would impact on the strategic and operational levels for India to be a net security provider within some areas of the IOR. Two important considerations emerge: First, the shape and contours the Indian Navy's force structuring should take to be future-ready and not merely "past-perfect" (the author's term loosely meaning "more of the same, but slightly better"). Second, would India and its maritime strategies be able to similarly bend economic heft and geopolitical influence for maritime operational advantages?

#### THE INDIAN AND CHINESE CENTENNIAL

India and China will both observe their centennials in 2047 and 2049, respectively. In China's case, much of the world is already aware of the upcoming landmark year and the determined way in which Chinese leadership has steered the ship of state towards great power, especially in the last three decades. India, meanwhile, is on the slower track, steering steadily, but with less vigour. Indeed, there are far fewer "Project 2047" watchers in the scholarly world as there are for "China 2049".

### THE STRATEGIC IMPERATIVES OF CHINA'S POWER AND PRESENCE IN THE IOR

In the next two decades, China is certain to be even more deeply involved as a geopolitical and geoeconomic player in the entire IOR, as well as beyond the littoral into the African continent and deeper into West Asia. Neither the colonial period of competing empires, nor the

American spread of influence during the Cold War provides much that is comparable. The Belt and Road Initiative (BRI) and its flagship, the China Pakistan Economic Corridor (CPEC), would be two major conduits for commerce and strategic influence. Never before has a synthesis of Mackinder Mahan and Spykman enabled any nation or empire to potentially straddle such a vast multi-continental expanse. This is not to say that the political and social dimensions of influence could be akin to what European empires had within their colonies. Neither would it be more biased towards the type of politico- military influence that the US had upon many regimes in the decades after World War II. Shah's Iran, some other West Asian countries, Pakistan, and the Philippines are some examples. It may be said that eventually the Chinese would be in a position to call the shots and pull strings in several countries in the IOR. This would be an amalgam of some of the colonial as well as American influences that have been mentioned. There is, however, an important consequence for the world in general. It is that China's ambitious grand strategy will inevitably have to be underwritten by military power. For India, for other democracies or indeed for nations within Asia-Indo-Pacific, to pretend or hope that it would not be so could be an egregious "postponement of precaution."

China might want to safeguard the objectives of its grand strategy thus:

- A greater network of places and bases, not only throughout IOR but along the South Atlantic coast of Africa as well. Eventually, it would also seek allies based on its own strengths and/or the allies' weaknesses within the Mediterranean.
- Its considerable investments in infrastructure as well as expectations of returns would require two approaches. The first would be politico-diplomatic influence that is not buffeted too much by electoral changes or successor authoritarian regimes. The

second would be the imperative of sustained protective presence. Since a fair proportion of this would be in less stable countries, and challenging socio-political environments, future points of friction and cause for increased presence should be expected.

- In time there would be even greater likelihood of China challenging India in the IOR. It is difficult to see how the coming consequences of its influence, increasing interests, competing economic power, occupation of Indian territory as well as adversarial attitude can further peace. We need to look beyond platitudes like "peaceful rise" or win- win for all. Although beyond the scope of this paper, China may simultaneously challenge East Asian countries, some ASEAN members, Australia and of course, the US across the Indo-Pacific.
- The ever increasing robustness of the Sino-Pak axis would have serious strategic, and consequently, operational implications for India. From situations of a one and a half-front war to a coincidentally two-front war, a serious possibility is of a nexus so deep that India may need to confront a pre-meditated, coordinated and combined conflict by these allies. In any case, good strategic planning by India ought to take into account this possibility. The Sino-Pak relationship is now a closer one than the trans-Atlantic partnership between the US and the UK. It would, therefore, be unwise to rule out the possibility of a two-front war.
- The web of friends, allies, subjugated and indebted regimes that Chinese statecraft is spinning quite successfully is likely to better serve Chinese hard-power than any comparable influence that a more benign, cooperative and values-driven India can leverage when and where it would be militarily most needed. Two examples are the recent developments in the Maldives or the difficulties Indian statecraft is facing in Seychelles.

#### LEVERAGE & LIMITATIONS OF NAVAL PRESENCE

With this larger picture in view, it is possible to focus more closely on the maritime domain. However, some fallacies and incongruities in terminology that are increasingly encountered need to be pointed out.

- The leverage of "presence" should be understood, but not exaggerated. Analysts and naval officers often over-read into the value that a group of ships, even a carrier battle group (CBG) actually provides especially off the coast of a near-peer or peer or peer-plus nation.<sup>5</sup> Presence in peace may often need to transit into missions of sea control/sea denial and power-projection. These are clearly missions in conditions of conflict. There is an example—by no means unique—of the limitations of presence or gunboat diplomacy. This happened in December 1971, (during the Indo-Pakistan conflict leading to the birth of Bangladesh) with the USS Enterprise Carrier Battle Group (CBG). It was diverted from a combat zone in the Vietnam theatre to another combat zone in the Bay of Bengal with hardly any outcome in favour of the USA.6 Presence through deployments is important, often necessary and sometimes very effective. At the same time, some limitations too need to be kept in mind. Like deterrence, presence has to work on the mind of who is being coerced or dissuaded.
- Another loosely-used term is Power Projection. In specific naval contexts, "Power projection focuses on land. Its goal is projection of naval force from sea onto land. It is a wartime mission. Execution of the power projection mission rests in strike warfare, amphibious warfare and strategic nuclear strike. Power projection is about delivering ordnance on land targets, including through soldiers landed or air-dropped ashore. Depending on a Navy's assessment of the likely vulnerability of a CBG, for example, its power projection capability through strike warfare changes.

- Naval deployments should not be conflated with sea control, power-projection and often even with presence itself in its sometimes consequential attributes of coercion and dissuasion. Sustained naval presence is an old operational concept commonly seen in the age of sail and in circumstances when MDA (Maritime Domain Awareness) was often limited to the horizon of a lookout atop a mast. Today, sustained presence does help in responding to sudden events, but these are mainly in the nature of search and rescue, disaster relief, constabulary and anti-piracy roles. While it can keep tabs on other navies and forces, it cannot, as such, do much about it. One Navy's deployments cannot necessarily prevent or reduce those of others. While sustained presence is important in some ways, it also comes with unintended costs of reduced intensity of combat training along the higher ends of the spectrum of warfare. It could wear out hardware (and sometimes people) often for questionable benefits. The Chinese are aware of this and their sustained deployments are likely to be easier in decades to come because of places and bases. Consequently, their transition from presence to conflict in the IOR could be easier than for the IN even in the choke points that the IN would like to focus upon.9
- There has been no serious naval conflict between countries of comparable strength, or even near-peer armed forces, for several decades. The 1982 Falklands war, and in some ways a few periods of the "Tanker War" during the Iraq-Iran conflict of the 1980s are perhaps the last occasions. Yet, if conflict between major armed forces takes place, the war at sea, from the sea and from land on the sea could still be deadly in its effects. Navies have to keep in mind the severely different conditions of war and of peace time deployments.

#### **MARITIME GEOGRAPHY & INTERESTS**

The drivers for and the possible military-strategic and operational benefits of Chinese initiatives and steadfastness in altering maritime geography in their favour within the so-called "first and second island chains" in the East and South China Seas (ECS and SCS) are well known. Likewise, much has been written over the past decade about the Chinese "string of pearls". It does not matter that this phrase is of western coinage. What should become more apparent is that China could, and in all probability would, leverage the spread of "places and bases" for operational advantages. The overlapping benefits of its economic, political-diplomatic, military sales, military training influences along the Asia-Africa-Pacific expanse should be kept in mind. More specifically, the following should be considered:

- In the future, the maritime geographic advantages of India's peninsular orientation are likely to erode further. Within the framework of operational art, tenets like interior lines of operations, central positions are generally advantageous, but this is neither etched in stone nor inviolable. On a national scale, the Indian central position and interior lines do not automatically yield advantages in a conflict against two fairly powerful neighbours that are separately or loosely or fully arrayed against us. China and Pakistan operating from two coordinated continental central positions, having their own interior lines and exterior lines and positions do not make a pretty picture. It would be apt to say that China, especially in league with Pakistan, will become as much a maritime neighbour as an already continental one. It is also likely that China may someday have more close partners in the Bay of Bengal Rim. Maritime operational geometry could tilt in their favour within the IOR.
- China will seek returns on its investments in the form of certain rights and facilities in some ports, airfields and bases. There

certainly are issues of neutral rights and obligations as are issues of belligerent rights and obligations. China's leveraging of its statecraft, its economic as well as military hard-power are for them to put into effect. So far, their statecraft has worked to the benefit of their policy goals. After all, thus far China has been a better practitioner of the *Mandala* theory than has India. There is little reason to believe they might falter strategically even if tactically there may be the occasional setback.

- Thus, these bases and places, with their growing space-based surveillance and overall cyber-warfare capabilities, in tandem with the forces and ordnance they can deploy can impact on the edge that the Indian Navy has. In case India has to contend with a combination of China and Pakistan, the maritime challenge would be considerable.
- On the other hand, despite the maritime geographic advantages that India has, it is beset with challenges. Despite the general goodwill that India enjoys with IOR countries, it is less likely than China to have any helpful leverages in conflict through some of these partnerships. In a recent paper, foreign affairs analyst and author Zorawar Daulet Singh brings out examples of India's regional interventions where the general drivers and consequences for these nations were positive. 12 In contrast, a totalitarian China, with few values-based drivers, and surplus hard power as well as political will, is likely to have more leverage. Its "unfriendliness of purpose" to use George Kennan's evocative phrase, while describing the policy of Soviet Russia as seen by the West, is something most beneficiary-nations may have to put up with. Kennan's description seems quite appropriate in China's case: "... from it flow many of the phenomena which we find disturbing in the Kremlin's conduct of foreign policy: the secretiveness, the lack of frankness, the duplicity, the wary suspiciousness, and the basic unfriendliness of purpose.<sup>13</sup>

- The BJP government has initiated long-overdue steps to bolster composite infrastructure and development plans in some of the islands in the Andaman and Nicobar group. While clichés abound about these "unsinkable aircraft carriers," militarily India has been conservative. Foremost is the resistance to meaningful and substantive jointness that leverages peninsular and island geography for military effectiveness. There is also the contrast wherein the Chinese are creating terrestrial geography via artificial islands and reclamation so that bases and airstrips can be built and the inability over so many years for India to lengthen runways, reclaim small patches or even cut a few trees. One hopes that the new impetus bears results.
- In the geographic continuum of the Indo-Pacific, the IN and other joint instruments cannot long avoid the solutions required to operate in the South and even East China Seas. Abhijit Singh is right in arguing that SCS matters for India's overall interests. Recent statistics show that over 30 percent (equivalent to \$189 billion) of India's trade uses the SCS for transit. To (This is bound to grow in quantum and perhaps even in proportion. In comparison, Japan has about 19 percent valued at \$240 billion in SCS). Will China choose not to molest Indian trade in conflict? Can India and its Navy simply let it go under the current reality that we may not be able to do much about it? What future steps could yield us reliable friends and allies so that the Indian military can have places, if not bases to meaningfully exert pressure from? What type of platforms could exert counter-pressure in the enemy's littoral?
- In a departure from much of the commentary, this writer would like to say that the Chinese do have a "Malacca Vulnerability" but it is not the same as a "Malacca Dilemma." This is to say that China does not have a choice but to try hard and keep its imports, especially petroleum, and commerce flowing both ways through the Malacca Strait and as required through the gaps in the Indonesian

archipelago. If it had a dilemma, it would imply that "we do nothing" or "wish we could do something" were also choices. This is also not to say that to reduce its vulnerabilities, it will not make alternate provisions, use strategic reserves, rely more on Pacific routes, etc. But, these gateways into the IOR would generally need to be available for use. This vulnerability poses challenges as well as opportunities not only for China but for India as well for the trade flows and adversarial deployments of the other side. It is quite likely that China may have more than a few options for places, if not bases in SE Asia and along the Bay of Bengal rim. Therefore, at this point it would be more accurate to say that the IN has a SCS "Dilemma." It needs to protect its interests there, but may not be currently able to.

#### THE DYNAMICS OF VASUKI AND THE DRAGON<sup>17</sup>

In case Sino-Indian conventional deterrence is likely to collapse, what might be the contours of the maritime dimensions of the larger conflict? This would, among many factors, depend on whether it is a war of choice for China or for India; were the triggers sudden or contrived; time for preparation for one side and ability to cope with surprise for the other; utilisation of the strategic & operational factor of time towards leveraging factors of space and force. Other aspects to be kept in mind could be:

• A trigger for conflict from some friction/ incident at sea is less likely, unless it is to be contrived. The primary objectives of policy would be focused on land. It is also likely that a limited conflict, with relatively limited territorial objectives, could result in primary engagements between armies and air forces. Escalatory pressures and even incentives for escalation could be quite dynamic. The side that would dominate escalation/influence de-escalation could gain

the military strategic advantage towards policy objectives in the conflict at hand.

- The maritime theatres (to imply the IOR; SCS and perhaps some areas of the South Atlantic along the West African coast) could be used for either escalatory or de-escalatory pressures. Sea power could provide considerable leverage under many circumstances to both sides.
- China's SSBN (Strategic ballistic missile submarines, nuclear) fleet would have no reason to deploy in the IOR because the main focus of their deterrent targeting would be on US territories; their missiles can reach India from the SCS. The much higher numbers of other vectors that could be pointed at India by China—and always bolstered by Pakistani vectors—would be adequate to serve the purposes of deterrence or escalation/ de-escalation dynamics. A future Indian SSN/ SSK (Nuclear/conventional attack submarines) force, suitably supported by Indian ISR (Intelligence/surveillance/ reconnaissance) and hopefully by some politically friendly support in the Far East could be used for deterrence pressure on these SSBNs in addition to our own SLOC (Sea Lines of Communications) protection and Chinese SLOC interdiction. 19 For major surface combatants, the vulnerabilities to attack, without commensurate opportunity for sustained offensive posture and strikes, makes combat deployments questionable within the Chinese A2AD (Anti-Access & Area Denial) environment. An SCS vulnerability for the India would always exist, but it need not long be a "dilemma".
- In actualising its strategy of offensive-defence (or A2AD), the PLA (Peoples Liberation Army, a term used here to denote the overall joint military force of China) has developed, or is at the threshold of developing, a quiver of land-based ordnance and long-range aircraft

that would be increasingly effective even in the IOR. Of this, the combination of targeting sensors (OTH ie Over- the- Horizon radars, space-based sensors) and anti-ship ballistic missiles (ASBM) as well as long-range cruise missiles and hyper-sonic weapons could pose the biggest problem for the IN to consider and solve in the IOR. There seems to be no particular reason why the PLA cannot do this in the IOR and there seems little rationale for them not to. Not only would such a sensor grid aid Pakistan, it might even make US CBG operations in the North Arabian Sea and the Mediterranean problematic. This could be no different from the current challenges that US CBGs and other surface ships could experience closer to China's shores. <sup>20</sup> It may be tempting—but quite unwise— to be dismissive of such possibilities.

• Another concern is the likelihood of a PLA expeditionary group that could threaten or actually attempt a landing in strength somewhere in our island territories. They already have a robust capacity in the form of large numbers of well-trained marines and expeditionary sealift capability. With a combination of shore-based and CBG-centred air-power they could attempt to create a diversion. This is likely in case China carefully plans a conflict of choice.

#### **EXAMINING INDIAN MARITIME-MILITARY TASKING**

Given the above analytical framework, the broad maritime tasking and re-tooling might need to be along these lines:

• Strategic Offensive ASW (SO Anti Submarine Warfare). In almost any scenario, it would be advantageous, perhaps even necessary to keep track of the Pakistan Navy's SSKs, many of which would be capable of nuclear cruise-missile launch. Since some of them would be similar to PLAN (PLA Navy) conventional SSKs

operating in the IOR, Underwater Domain Awareness (UDA) would be both, complex and critical. The other area where SOASW for Chinese SSBNs should be on the drawing board would be in the SCS. Among other things, this could be a contributor to deterrence stability, and escalatory/ de-escalatory leverages especially necessary during a conventional conflict.

- Strategic Defensive ASW (SDASW). As the maritime leg of India's nuclear triad begins to gather steam (quite literally, since that is what nuclear reactors help produce) and India transits to Continuous at Sea Deterrence (CASD), providing SDASW to "boomers" on transit or on patrol will be a resource-heavy, silent and unseen task.<sup>21</sup>
- Similarly, a certain degree of SOASW would be necessary under normal peacetime conditions. Marking an adversary's submarine-based nuclear deterrent capability (whether SSBN/ Pakistani SSK) would be a part of the IN's activity.

SOASW and SDASW would require resources in terms of SSNs and SSKs, maritime patrol aircraft, future space- based sensors and not the least, unmanned aerial and submersible vehicles. As these go about their tasks, UDA in peace would yield benefits in war that would be something adversaries would have to allow for.

• ASW in Conflict. In decades to come, the IN would need much more ASW capacities and capabilities. Submarines and submersible vessels, manned—and perhaps unmanned—are bound to gain ascendancy due to the relatively better virtues of stealth. If the currently predominant thinking that submarines are for sea denial and CBGs for sea control changes, a navy could realise that this underwater force, when combined with greater networking, more autonomy, more ordnance carrying capacity for multiple types of

targets could well span naval missions encompassing power-projection, sea control and far more effective sea denial. Far greater numbers of submarines are required than the "six of this and later six of that" approach that the IN has preferred. Could this change to a "dirty dozens" approach? One hopes so and if this requires dispassionate analysis of the opportunity costs of the considerably increased investments in surface forces, which could have declining survivability in near-peer or peer maritime threat environments, then it needs to be done.

- sense, a navy's counter-value missions would be against another nation's economic and war-waging capacities. This would include SLOC interdiction, land attacks against requisite "value" targets, etc. Counter-force missions are those designed to weaken the adversaries' forces via combat/ cyber-ops etc. Among other benefits, this could impact the enemies' ability to undertake further counter-value and counter-force operations. One could say a few more things about these missions:
  - First, and without risk of over-simplification, at the tactical level these missions essentially are about putting ordnance on target (not so simple) and avoiding becoming targets for the enemy's ordnance (again, not so easy).
  - Second, these missions are usually simultaneous and complementary unless there are great advantages of asymmetry with the enemy having nothing or not much to throw back at the other side. Airpower's (whether deployed from aircraft carriers or by air forces) recent advantages in both Gulf wars, Kosovo, Syria, and even Afghanistan are examples of the benefits of asymmetry. Likewise, the success of shipping-sanctions or blockades by maritime forces or

board and search operations become easier in asymmetric environments.

- Third, the optimism in airpower's speed of effects obtained in counter-value targeting has almost always been high *a priori*. On the other hand, *a posteriori* assessments, have invariably been more sobering. Similarly, the effects of maritime blockades, maritime trade warfare (SLOC interdiction), and even economic sanctions envisaged by nations via their maritime forces and associated instruments take much longer to start showing serious effects on an enemy. Maritime trade warfare could be critical to conflict outcomes. It could, in some cases be a "game-changer"; but the game would likely be long.
- Fourth, all this notwithstanding, the need to undertake and persist with counter-value missions from the start of a conflict exists. It is just that "irrational exuberance" (to use Alan Greenspan's phrase) should be kept at bay and a peer enemy should be expected to shore itself against effects and try and do similar things to the other side.
- Fifth, depending on outcomes desired in the time-space-force conundrum that dynamically involves the enemy, much thinking would be needed in resource allocation and switching between these missions. If a high tempo of action at the operational and tactical levels of warfare is required, then success in counter-force actions could eventually help increase effectiveness of counter-value operations.
- Sixth, this could mean that Indian interdiction of Chinese shipping (and it is useful to remember, as pointed out by James Goldrick that you do not interdict SLOCs, you have to interdict ships by doing something to them or about them) will have slower effects than is widely believed.<sup>23</sup> Likewise,

Chinese interdiction of ships of Indian interest in the SCS/ECS or even in the IOR should be expected, but would hurt India less than may initially be believed. There could be "loss of face" issues for either side and not only for the Chinese.

- Seventh, these missions will require newer ways of qualitatively and quantitatively delivering ordnance on target.
  In this matter, India could dangerously lag behind China even in the IOR especially with Pakistan on their side.
- Eighth, maritime counter-force and to an increasing degree, counter-value missions may be undertaken by ordnance and platforms that are fired/launched from land. Jointness is the key and not a buzzword. The Chinese have understood this and are doing a lot about it.

CBG and Surface Operations: The IN is not badly off as far as aircraft carrier capability goes. By 2020 0r 2021, the IN will have one brand new aircraft carrier (INS Vikrant, currently building at Kochi) and another (INS Vikramaditya) that would be less than ten years in commission. Given adequate inkling of an impending conflict or in a war of choice involving India's likely peer/ near-peer adversaries, India should arrange to have them both available. Carriers would remain useful in asymmetric conditions, but challenges in near-peer environment cannot be dismissed. For strike warfare as part of powerprojection, carriers have to necessarily operate in smaller geographical areas even if they might steam, say, nearly 600 miles in a single day within that polygon while vigorously generating combat sorties. An adversary should be expected to do his utmost, or almost utmost to damage or sink a carrier and major escorts using various means. In media debates that abound these days, simplistic calculations of the PLA's "x" number of carriers with the IN's mere "y" numbers overlook each country's realities and requirements. For one, an enemy's carriers can be

countered by instruments other than carriers and their aircraft. Further, other instruments could become more adept at delivering ordnance on target which is the primary task that carrier's aircraft undertake. China may use its carriers in more asymmetric circumstances as it becomes a global power just like the Americans do and just like the Indians could do until about 2045/2050 when Vikramaditya may need to be retired. In symmetric combat environments, all carrier-operating navies are bound to be more circumspect as indeed are the Americans with their 10 carriers and amphibious force LHA/ LPD ships. The Chinese may also be less constrained by budgets than India and the IN may be. Therefore, for ensuring overall effectiveness across the spectrum of conflict, the IN might need to think several things through to remain formidable and future-ready.

Many, if not most, of its platforms would need to be effective within the operational and tactical environments that might exist in decades ahead. This thought process is not applicable only to aircraft carriers. Hard thinking may be necessary to examine the "anti-aircraft" environments that may affect even fifth/ sixth-generation fighters about 25 to 30 years from now. Or how would tanks be used in more intense "anti-tank" conditions? Admittedly, this is not an easy exercise and the comfort zones of "past-perfect" force structures have had their allure as history sometimes demonstrates. The Navy could, therefore, look dispassionately at opportunity costs and alternate solutions. Given the peer conflict environment, the IN needs to de-emphasise the "symbolic" value of the carrier and look at its likely future substance. Harsh Pant is right when he states, "The larger question the Indian Navy needs to ask is whether it should really prioritise aircraft carriers over its other requirements."24 In terms of frigates and destroyers, the IN perhaps ought to be considering truly long range SAM (perhaps with some BMD) and land attack capability and a much larger ordnance capacity for these. However, considering the growing difficulties of having any real effect in offensive ASW waged by surface ships, the IN's inclinations for many corvettes and small ASW ships seems misplaced when extrapolated into the future. Notional money saved could have been spent on ASW helicopters and medium range ASW aircraft. This author has written elsewhere that for naval shipbuilding, "the guiding principle ought to be to build what we need, not merely what we can." Placing orders for specious reasons like keeping yards alive and working is not a strong argument for relatively sub-optimal platform choices. A final observation: Indian Armed Forces, especially the Indian Navy and Indian Air Force should not go on believing that the "next" major acquisition is going to be the "game-changer." This over-stated phrase was last used for Vikramaditya<sup>26</sup> and may have figuratively applied to Viraat and Vikrant. Carriers can be important in many circumstances, but not game-changers. In many ways it is the game that is changing for them as it did for battleships decades ago.<sup>27</sup>

Power Projection: Based on the earlier stated definition of power projection, SSBNs on deterrent patrols, and other more easily understood platforms and combinations for strike would be available to the IN as well as PLAN. In the case of China, while these may not be always deployed against the Chinese coast per sé, there could be scope for doing so against their places and bases elsewhere once escalatory dynamics of doing so in third nation's geography are worked out. However, the major areas that power-projection from the sea needs rethinking, redoing and retooling is brought out next. First, the strike capabilities from SSKs and SSNs of sufficient precision and reasonable quantum need to be arranged. Second, joint strike capabilities with land-based long range cruise missiles and long-range manned and unmanned aircraft fielded jointly need creation and enforcement. This type of ordnance should have anti-ship versions as well. Third, the IN would need credible, permanent naval infantry/ marines for expeditionary warfare. These could be first to be deployed, or perhaps in

coordination with airborne assault troops. It would be a pity if India continues to have the unsatisfactory arrangements of rotational and inevitably under-trained infantry battalions. The Navy need not "own" these marines, but they cannot really be "temporary" marines as is in vogue. Fourth, it is quite difficult to envisage these steps in the SCS/ ECS without places and bases, as well as friends.

**Cyber-Offence and Defence.** A Navy that will be increasingly networked and hopefully more integrated should be able to leverage national cyber-offence and defence capabilities. China is bound to exert itself in cyber warfare and its impact on maritime operations could be significant. In the absence of a functional platform plus ordnance-linked global positioning system that is entirely Indian, Indian vulnerabilities would need to be regularly plugged.

#### PARTNERSHIPS, ALLIANCES, AND COALITIONS

Finally, nations would find it difficult to deter or engage in conflict with China without some form of partnerships. China has some credible partnerships, perhaps not as close and intertwined as with Pakistan or North Korea, but potentially effective from the Chinese point of view, nonetheless. The trajectory of such growth, however, seems positively in China's favour. While India's usage of places and bases in conflict is an operational detail, ensuring it happens requires astute strategic statecraft. Commentators and analysts have written quite a bit on exercises like Malabar, or possibly enlarged maritime exercises with navies of Australia and Japan. Fundamentally, though, one major point is missed. In the absence of clear political like-mindedness, policy match, apex resolution of security and intelligence sharing issues, these exercises are the tail that cannot wag the dog especially the absent political dog. Misplaced hope that somehow the US will be a lead player in this matter must be avoided. In Clausewitzian parlance, the "value of

the object" for the US to actually involve themselves over Sino-Japanese disputes or in SCS or in the Himalayas for that matter may not be *de facto* high enough. Declarations of "100 year partnerships" or other pronouncements do not by themselves account for much, beyond rhetoric and diplomatic niceties. True coalitions need substance far more than symbolism. There is little doubt that it would be a coalition that could best deter China and perhaps modify its behaviour to some extent. Nonetheless, in the absence of a more formal partnership and mutual commitment it is as unlikely for instance, for India to jump to Japan's aid over an assault by China on Senkaku or Japan to India's if Tawang were to be attacked. Maritime and naval cooperation or diplomatic support are useful, but not sufficient to genuinely worry the other side unless an alliance by any other name exists. That is why a PLAN-Pak Navy relationship is of greater concern to India than a Malabar exercise to China, its loud protests notwithstanding.

#### CONCLUSION

This paper links some of the opportunities and positives as well as problems that India could face at the maritime operational levels in case of a conflict with China, and perhaps with Pakistan as a close partner of Beijing. The erstwhile leadership of the Indian Navy has done quite well to make it a fairly strong navy. The tasks ahead require some shifts in approach and execution to make the Navy more formidable and future-ready rather than merely "past perfect". Moreover, all services and other agencies in India need to fully overcome narrow turf sensitivities, embrace true jointness, put in place real civil-military reforms towards effective future warfighting and, not the least, indigenise as fully and as deeply as circumstances permit.

An increasingly economically, diplomatically and militarily powerful China is bound to break and make rules in the decades to come. Power matters everywhere and in everything. This is acknowledged rather well in a naval axiom that if you rule the waves, you can waive the rules. A Pax Sinica is unlikely to usher in global peace any more than Pax Britannica or Pax Americana did in their own time. Therefore, if the Vasuki is to deter the Dragon or fight it to defeat it, then more could be done. To paraphrase Mahan's words, it is better to think all this through without waiting for the next monsoon. ©RF

#### **ENDNOTES**

- 1. Alfred Thayer Mahan, *Britain & the Germany Navy*, The Daily Mail, 4 July, 1910. This newspaper opinion piece has been reproduced in *Mahan on Naval Strategy: Selections from the Writings of Rear Admiral Alfred Thayer Mahan with an introduction by John B Hattendorf*, (Naval institute Press, 2015), Ch XI.
- 2. Mahan, *ibid*. Mahan paraphrased what Admiral Arthur Herbert, Earl of Torrington said to the Earl of Nottingham ca 1689-90: "I own I am afraid now in winter when the danger may be remedied and you will be afraid in summer when it is past remedy." Clarification offered via email by Prof John Hattendorf and RADM James Goldrick, RAN (Retd).
- 3. This writer prefers to use strategies in the plural because rarely would any major nation with complex maritime interests make do with only one strategy. While strategy in the singular could be acceptable in a title for eg, 'Ensuring Secure Seas: India's Maritime Security Strategy', there have to be several corresponding, overlapping or inter-linked strategies at play in peace as well as in conflict.
- 4. The term "Project 2049" is taken from the eponymous "Project 2049" Institute, a US think tank based out of Arlington, VA.
- 5. Author's use of this terminology is more related to the effective symmetry or asymmetry that obtains in the area and circumstances of a particular case. For instance, a US CBG centred around a carrier or two carriers offers considerable leverage, if required to be used in conflict off Syria, but lesser off North Korea and even lesser off China. Secondly, should "presence" transition to conflict, vulnerabilities in *doing* "Sea Control" cannot be ignored. Creating advantages of asymmetry in time and place is, of course, very desirable. Readers would agree with the adage that, "If you find yourself in a fair fight, you haven't planned your mission properly!"
- 6. For a recounting of the way in which a light carrier like Vikrant was used off the coast of East Pakistan in Dec 1971 after a Pakistan Navy submarine had been sunk and the Indian Air force had effectively established command of the air, see Sudarshan Shrikhande, Wings Over Water: The Rationale for Reinforcing Carrier Aviation for the Indian Navy (Naval Despatch, NHQ, Indian Navy, Vol 57, March 1998) pp 12-22. This was an abridged version of the dissertation submitted by the author for the M.Sc Defence & Strategic Studies degree from the Staff College/ Univ of Madras. For a comprehensive analysis of the USS Enterprise deployment in the closing stage of the 1971 war, see Raghavendra Mishra, Revisiting the USS Enterprise Incident (Journal of Defence Studies Vol 9, No 2, April–June 2015) pp. 49–80 http://idsa.in/jds/9\_2\_2015\_Revisitingthe1971USSEnterpriseIncident.html, accessed 23 June 2015.
- 7. Abhijit Singh, *India needs a more robust presence in Asia* (Lowy institute 1 Nov 2017)https://www.lowyinstitute.org/the-interpreter/india-s-mission-ready-

naval-posture-must-extend-beyond-indian-ocean accessed 02 Nov 2017. In this very interesting article, the analyst has rightly pointed out some of the shortfalls of the IN as well as the difficulty in doing anything significant in the SCS as of now. However, the generally loose interpretation of 'power –projection' as a term outside of conflict where the term 'presence' is adequate can lead to somewhat incorrect understanding of the implications in practice. Abhijit Singh points out some of the misconceptions of current naval thinking in terms of "outcome- oriented deployments." See Note 11 below.

- 8. John Byron, *It's War With Anastasia* (USNI Proceedings, Annapolis, Feb 1992) p 55. Byron's article of a scenario leading to a war of choice with a fictional country, Anastasia is an article this author frequently uses in war and staff colleges as a teaching guide that makes the connections between Policy and Strategy and thence to joint mil strategies and operations.
- 9. MOD, India Press Release during the Naval Commanders' conference in end- Oct 2017, "pib.nic.in/newsite/pmrelease.aspx?mincode33" accessed 03 Nov 2017. Recent discussions in the US have commented on the questionable benefits of too many deployments after the spate of accidents. While the two are not, or at least ought not be related, some deployments ordered by navies are, in a manner of speaking, "lets be seen to be something...". James Goldrick, a retired RAN flag officer has also recently recommended that it was time that the RAN used its scarce resources better in the Pacific and Eastern IOR than in the Persian Gulf. See, http://www.theaustralian.com.au/opinion/adfs-naval-focus-must-shift-from-middle-east-to-western-pacific/news-story/12b36b9d670f9f7b1b16e018d7b80ce7. Naval planners in any country or of a coalition would also need to factor the difficulties posed by relevant aspects of international law in some choke points, international straits and archipelagic waters.
- 10. The phrase "place" was perhaps first used by Admiral William Fargo in March 2004 in a Congressional testimony. Cited from Daniel J Kostecka, *Places and Bases: The Chinese Navy's emerging Support Network in the Indian Ocean* (Naval War College Review, Winter 2011, Vol 64, No 1). The foresight of Chinese political and naval leadership in publicly articulating the need for their strategy to have places and bases is apparent in this analysis.
- 11. Sudarshan Shrikhande, Beati Sunt Possidentes: Blessed are Those in Possession; A Leitmotif for Chinese (and Pakistani Statecraft, Apr 10, 2017, http://www.vifindia.org/article/2017/april/10/beati-sunt-possidentes-blessed-are-those-in-possession. More than anyone else in the post- colonial world, the Chinese seem to have understood the dictum, possession is nine-tenths of the law. After all, way back in 1963 the Pakistanis were smart enough to cede them the Shaksgam Valley to China. In many ways, today's CPEC would not have been possible without this important step. That it impinges on India's sovereignty and brings severe challenges to India's statecraft as well as war-craft is, from the Chinese perspective, a problem they need not solve!

- 12. Zorawar Daulet Singh, *Foreign Policy and Sea Power: India's Maritime Role Flux* (Journal of Defence Studies, Vol. 11, No. 4, October-December 2017) pp. 21-49.
- 13. George Kennan, *The Sources of Soviet Conduct* (Digital History ID 629http://www.digitalhistory.uh.edu/disp\_textbook.cfm?smtID=3&psid=3629)
- 14. Abhijit Singh, ibid.
- 15. "How Much Trade Transits the South China Sea?," *China Power Project* (blog), August 2, 2017, https://chinapower.csis.org/much-trade-transits-south-china-sea/. accessed 10 Nov 2017.
- 16. Zorawar Daulet Singh, *ibid*, quoting Admiral Arun Prakash.
- 17. Vasuki is a gigantic sea-serpent from Indian mythology. This was earlier used by the author (Captain Sudarshan Shrikhande) in the title of an unpublished paper that was awarded the first prize in the Robert E Bateman International Essay Contest at the US Naval War College, Newport, RI in June 2003. The title was Vasuki and the Dragon: Shaping India's Maritime Strategy as a Counterbalance to China.
- 18. Two cases that come to mind are the explosion on the USS Maine in Havana Harbour in 1998 which provided a trigger for the Spanish American War and yielded the Americans great influence in the Caribbean, Latin America and of course a new colony, the Phillipines! Another instance, also American, was the Gulf of Tonkin incident which was used for escalating involvement in Vietnam in Aug 1964.
- 19. Sea Lines of Communications are lines/ routes along which a nation's sea borne trade, naval and expeditionary forces move in conflict or tension. These could be conforming to or quite different from shipping lanes and routes that exist in normal circumstance
- 20. Ashley Tellis, address at the Goa Maritime Conclave 01 Nov 2017 conducted by the (Indian) Naval War College. In an excellent, and unexpected shift, Prof Tellis candidly outlined the concerns the USN had with operating carriers against nearpeer nations like China. He outlined that the shift of the methods by which ordnance fired from land, especially the ASBM would be countered, at least not initially by carriers at all, but by newer weapons, land-based aircraft etc. He felt that there was nothing in the ASBM that was not feasible in terms of science or engineering for the Chinese.
- 21. For an excellent introduction to the complexities of SOASW and SDASW, Tom Stefaniack's *Strategic Antisubmarine Warfare and Naval Strategy* (Lexington Books 1987).
- 22. Current plans seem to be for merely six boats of the Scorpene class to be followed by the six of the 75 (I) type. Without AIP and with limited land-attack capability, the Scorpenes fill in a critical current gap may not quite be the futuristic boats the IN requires.
- 23. This point is made well by James Goldrick in his paper, Mahan & Corbett: Concepts of

Economic Warfare, Proceedings of the Chief of Army's History Conference 2013 in Armies and Maritime Strategies (Big Sky, 2014) pp 17-28. A second fine reference for readers on the issue of Trade Warfare (or War of Supply) is Christopher J McMahon, Maritime Trade Warfare: A Strategy for the 21st Century (NWC Review, Summer 2017) pp 15-38. A third reference is older, but very relevant as well by Gabriel B. Collins and William S. Murray, No Oil for Lamps of Chin (NWC Review, Spring 2008) pp 79-95.

- 24. Harsh V Pant, *The Dragon in the Indian Ocean is shaping Local Geopolitics; does India have an Answer?* (Swarajya Magazine June 05, 2017), https://swarajyamag.com/magazine/the-dragon-in-the-indian-ocean-is-shaping-local-geopolitics-does-india-have-a-counter, accessed 08 June 2017.
- 25. Sudarshan Shrikhande, *Make in Japan to Made in Japan: Indigenisation Lessons from the Imperial Japanese Navy, 1880-1941*,(Occasional Paper Aug 2016 Vivekananda international Foundation, New Delhi) p 33.
- 26. TOI, 14 Nov 2013, https://timesofindia.indiatimes.com/india/INS-Vikramaditya-will-be-a-game-changer/articleshow/25724093.cms
- 27. The First World War provided ample indications of how vulnerable battleships and battle cruisers had become to relatively asymmetric threats like mines, submarines and torpedoes fired by torpedo boats, destroyers, or submarines. Inter-war years showed that aircraft would also be a threat especially with torpedoes and more accurate bombing. All this happened even as battleships themselves became more powerful, larger, faster and better armed as well as armoured. They progressively got better fire control, radar etc. Yet, their vulnerabilities were not adequately acknowledged by the so-called "battleship admirals." The game had simply changed for the battle-wagons.
- 28. James Goldrick, *India's Expeditionary Journey* (USNI Proceedings Mar 2013, vol 139/3/1, 321) accessed on 11 Nov 2017. https://www.usni.org/magazines/proceedings/2013-03/indias-expeditionary-journey. This essay is an excellent, balanced account of some of India's expeditionary achievements as well as shortcomings.

**Observer Research Foundation (ORF)** is a public policy think-tank that aims to influence formulation of policies for building a strong and prosperous India. ORF pursues these goals by providing informed and productive inputs, in-depth research, and stimulating discussions. The Foundation is supported in its mission by a cross-section of India's leading public figures, including academic and business leaders.



Ideas · Forums · Leadership · Impact

20, Rouse Avenue Institutional Area, New Delhi - 110 002, INDIA Ph.: +91-11-43520020, 30220020. Fax: +91-11-43520003, 23210773

E-mail: contactus@orfonline.org Website: www.orfonline.org