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MILITARY IMPLICATIONS OF CHINA'S RECLAMATION

DRIVE IN SOUTH CHINA SEA

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Reclaiming land from the sea is a common activity around the world. Almost all coastal states and major cities around the world have been engaged in such expansion activities for infrastructure development in the past. The Netherlands is a known case of a country that has expanded its land area substantially by reclamation from the sea. The US and Singapore are other examples of countries involved in major reclamation activities. Major projects like; Hongkong airport and Dubai's Palm Islands are other good examples. Closer home in India, Mumbai has added a major portion of its prime land in the business district of South Mumbai through reclamation from sea.

China has been engaged in land reclamation activities in the South China Sea for the last few years. But since September 2013, it has embarked on a drive to undertake major reclamation and construction on several reefs and rocks in the in the South China Sea. China's land reclamation efforts in the South China Sea are concentrated in the Spratly Islands group, which are located in the world's most heavily trafficked SLOCs.

Reclamation activities of such nature certainly have military/operational, diplomatic, and legal implications. As per the United Nations Convention of the Laws of the Seas (UNCLOS) there is no sanctity for such claims of ownership in the international waters. Notwithstanding that, as a first step, China wants to establish a 12 Nm of territorial waters surrounding these rock features. In the next move, claim for an EEZ of 200 Nm may be projected, which can give China the ownership of the entire sea wealth and sea bed resources in this part of the South China Sea.



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Reclamation Activities in the South China Sea

Over 2,000 acres (809 hectares) of artificial land has been created on these Chinese-occupied reefs/rocks that fall under disputed territories between China and neighbouring states.ⁱ The major areas under reclamation include a number of reefs which are: Mischief Reef, Fiery Cross Reef, Cuarteron Reef, Gaven Reef, Hughes Reef, Johnson South Reef, and Subi Reef. All these reefs fall under disputed territory between China and its neighbouring states including Malaysia, the Philippines, Vietnam and Taiwan. Among these, Hughes Reef, Johnson South Reef and Mischief Reef fall within the Exclusive Economic Zone (EEZ) of the Philippines. The reclamation activity is progressing well and China's Foreign Ministry has announced on June 16, 2015, that China would complete its reclamation work "in the upcoming days" and then turn its attention to building facilities on the newly created artificial islands.ⁱⁱ



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Reclamation and construction activity

Indicated by satellite photographs
As of June 1, 2015, reclamation and construction are ongoing.

● China-occupied reefs

● Reefs occupied by other claimants

Reefs not shown to scale

Fiery Cross Reef: Reclamation began in 2014. Construction includes an airstrip, a harbor capable of supporting tankers, and several structures.

Cuarteron Reef: Reclamation began in 2013. Construction includes multiple new structures, and possibly a new helipad.

Gaven Reef: Reclamation began in 2014. Construction includes a structure with possible anti-aircraft tower.

Hughes Reef: Reclamation began in 2014. Construction includes a structure with possible anti-aircraft tower.

Johnson South Reef: Reclamation began in 2014. Construction includes several structures, including possible radar facility.

Mischief Reef: Reclamation began in 2015.

Subi Reef: Reclamation began in 2014.

Source: Chinese Land Reclamation in the South China Sea: Implications and Policy Options, 18 June 2015,

<https://fas.org/sgp/crs/row/R44072.pdf>

Under UNCLOS, the reclamation does not allow China to claim normal 200 nm EEZs around these islands. The most that a nation could claim around any of the features is territorial waters of 12 nm, and this is only claimable if, before reclamation began, the reef included features above water at all times.ⁱⁱⁱ It is well known that prior to reclamation, none of these features could qualify to be called a natural island that could support human habitation, a mandatory requirement under the UNCLOS for making such claims. But, due to the complex nature of the tidal conditions in the area under consideration, it may be difficult to establish the status of these rocks/ islands, whether they remained above water at high tide prior to reclamation, a precondition for the claim of sovereignty. Clearly, China wants to take advantage of this situation and assert claims of ownership.



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However, if one looks at the picture in its entirety, within the Spratlys, not only China but all the claimants except Brunei have undertaken reclamation activity. In fact, China occupies only seven features in the Spratly Islands group. On the other hand, Vietnam holds control of 29 islands, the Philippines eight features, Malaysia five, and Taiwan occupies one island.^{iv} In this context, China feels that other countries have illegally invaded and occupied China's islands.

Satellite imagery released in April 2015 by CSIS's Asia Maritime Transparency Initiative indicated that Vietnam has embarked on the reclamation recently on two of the Spratly Islands that it occupies, Sand Cay and West Reef.^v In terms of total area, Vietnam has reclaimed approximately 200,000 sq m of reclaimed land. As far as sea bed resources are concerned, China has started hydrological survey prior to drilling operations but so far not drilled any oil well in this region; however, other countries of the region have drilled 1,380 oil wells in the South China Sea, with annual production of about 423 million barrels.

Military / Operational Implications

Looking at the reclamation activity in the past two years or so the entire world is feeling concerned. A question which comes to everyone's mind is whether this activity would improve China's ability to operate military assets further from the Chinese coast or deter approaching threat from the sea. On May 30, 2015, US Secretary of Defense Ashley Carter said, "... with its actions in the South China Sea, China is out of step with both the international rules and norms that underscore the Asia-Pacific's security architecture, and the regional consensus that favours diplomacy and opposes coercion."^{vi}



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No doubt, the military value of reclamation activity in these islands assumes importance due to its location in the South China Sea, far away from China's mainland. In general, it could improve China's ability to operate warships and military aircraft at extended ranges during any contingency and launch combat operations against any adversary. Till now, following the old concept of maritime strategy limited to coastal defence, PLA Navy units used to operate close to the east coast of China and did not venture out far due to logistic and operational constraints. Availability of forward operating naval bases in the Spratly Islands will allow PLAN to establish fuelling, logistic and maintenance facilities resulting in increased time on task and avoid return to main land for turnarounds.

Although, looking at the size of these reclaimed islands one cannot expect China to station big garrison of military troops with significant power projection capabilities. But, establishment of limited military support facilities in the South China Sea can provide a workable solution to the logistical challenges of sustaining operations of PLA Navy ships, far from China's mainland. The next logical step will be of stationing few small ships on these islands on rotational basis as being done by the U.S. Navy in the Persian Gulf and Singapore. In fact, PLAN operations aimed at providing energy security along the SLOCs can also get necessary support from these facilities. Looking into a possibility of China entering into a conflict situation with its neighbours over possession of disputed features in the South China Sea, a flotilla of Landing ships based on these islands can be promptly despatched to launch an amphibious operation. With the use of helicopters and amphibious craft, and support from Chinese mobile artillery stationed on the outposts, such facility could be used for conducting assaults on nearby islands held by rival claimants.^{vii}

Based on satellite imagery inputs, it has been ascertained that the military facilities established on various islands in the South China Sea include: Troops' barracks; Anti-Aircraft gun systems and artillery; Communication equipment; Air Early Warning Radars; Helipad and/or Runway; fuel dumps; and jetties. In addition to the 3000 m runway, the facility that China is building at Fiery Cross Reef may include a harbour large enough to berth surface combatants.^{viii}



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Reclamation activity on Fiery Cross Reef

Source: <http://www.nytimes.com/interactive/2015/07/30/world/asia/what-china-has-been-building-in-the-south-china-sea.html>

In order to maintain total surveillance of the South China Sea area, China may equip these islands with air and surface search radars and Electronic Support Measures (ESM) equipment, which would improve China's Maritime Domain Awareness (MDA) and its intelligence, surveillance, and reconnaissance (ISR) capabilities in the area. With the availability of an airfield China might also operate UAVs, MPAs and/or AWACS (Airborne Warning and Control System) aircraft. Such aircraft will further provide MDA and ISR coverage over surrounding waters and airspace up to the second island chain. With this air effort, the Chinese maritime operations will have near-continuous air coverage throughout the area of interest.^{ix} This data will also be a pre requisite for China to establish an Air Defence umbrella in the South China Sea.

As a parallel action, China has already initiated a movement, with 192 UN member states under their leadership, demanding few changes in interpretation of Maritime Zones Act (MZI) of UNCLOS, which may result in restricting foreign military ships and aircraft access to China's EEZ and the airspace. Imagine if such an amendment is put in place, China will be able to keep all extra regional forces away from the South China Sea. And if the same rule is followed across the globe, at



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least 38% of the world's seas that fall under the jurisdiction of EEZ will be out of bound for the rest of world armed forces, not only curbing freedom of navigation but also exposing busy and important energy routes without any protection.

Militarisation of this region will also result in other states augmenting their islands with additional infrastructure and garrison. In fact, Vietnam has already taken control of 29 features and positioned more than 2000 troops to protect their assets. They have constructed a harbour, missile bases, barracks and lighthouses. Even before China's recent reported construction of an airstrip on Fiery Cross Reef, four other claimants had already built airfields to operate fighter aircraft from features they control in the Spratly Islands. Those airfields are on Itu Aba Island, occupied by Taiwan; Spratly Island, occupied by Vietnam; Thitu Island, occupied by the Philippines; and Swallow Reef, occupied by Malaysia.^x

Another military implication making strong impact relates to augmentation of China's anti-access/area denial (A2/AD) systems. China could use these reclaimed islands for installation of surface-to-air missiles (SAMs), anti-ship cruise missiles (ASCMs), Anti Submarine Warfare (ASW) aircraft to extend China's A2/AD network further into the South China Sea. Iran has made similar deployments on islands it controls near the Strait of Hormuz^{xi}. In addition, few medium/small PLAN ships (such as Type 022 missile-armed attack craft or Type 056 corvettes) might be stationed at one or more of the sites, perhaps on a rotational basis.^{xii} Availability of the 3,000 m runway on Fiery Cross Reef will be well suited for operational turn around for aircraft taking off from mainland airfields and Hainan Island thereby extending their ROAs to the far corners of the South China Sea.

Air Defence Identification Zone

An important aspect of China's reclamation drive is to strengthen its air defence network. Establishment of an ADIZ in the major portion of the South China Sea will be a big step in this direction. Islands/ Sites located at appropriate distances from the main land could be equipped with necessary radar and EW sensors to provide AD network capable of providing early warning of the



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incoming strikes/ air threat well beyond the 'First Island Chain'. Interceptors positioned at the Fiery Cross Reef airfield could be tasked to handle the intruding aircraft.

It is pertinent to mention that China unilaterally established an ADIZ over two thirds of the East China Sea in November 2013, without any consultations with neighbours.^{xiii} Obviously, this has resulted in huge overlaps with other countries' ADIZs. Even the disputed Senkaku Islands and joint training airspaces of US and the Japan Air Self Defence Force fall within this zone. Although China claims it to be a self defence right, it has become a matter of concern for the neighbours. Further, the reality on ground is that the PLAAF lacks the capability to monitor the entire area under the declared ADIZ specifically in terms of land based radar coverage, aerial refuelling and air early warning and control platforms.^{xiv} US had opposed declaration of this ADIZ and even flew its military aircraft across the zone. In any case, establishment of ADIZs, in any part of the world, does not have any legal sanctity. But declaration of similar ADIZ in the South China Sea will not only impede freedom of navigation but will also escalate tensions in the area.

Conclusion

There is no doubt, that China's reclamation activities are inconsistent with the 2002 Declaration on the Conduct of Parties in the South China Sea (DOC). Even the Chinese leadership may be well aware of the fact that the claims do not have any sanctity under the UNCLOS; still they have decided to continue militarisation of these islands. It is evident that their sovereignty claims are primarily aimed at getting a major portion of the South China Sea under their maritime and air defence umbrella, by positioning PLAN and PLAAF units with required sensors and equipment on these islands. Exploitation of the sea bed resources in the extended territorial waters and EEZ may be the second



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priority. The military implications of establishing these forward operating bases/ outposts at about 500 nm from the mainland, and ADIZs will certainly escalate the volatile situation in the South China Sea, in the near future.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

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ⁱ Chinese Land Reclamation in the South China Sea: Implications and Policy Options, 18 June 2015, <https://fas.org/sgp/crs/row/R44072.pdf>

ⁱⁱ Ministry of Foreign Affairs of the People's Republic of China, "Foreign Ministry Spokesman Lu Kang's Remarks on Issues Relating to China's Construction Activities on the Nansha Islands and Reefs," June 16, 2015, http://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2535_665405/t1273370.shtml.

ⁱⁱⁱ Chinese Land Reclamation in the South China Sea: Implications and Policy Options, 18 June 2015, <https://fas.org/sgp/crs/row/R44072.pdf>

^{iv} "Position Paper of the Government of the People's Republic of China on the Matter of Jurisdiction in the South China Sea Arbitration Initiated by the Republic of the Philippines," December 7, 2014, <http://www.fmprc.gov.cn/ce/cegv/eng/zywjyjh/t1217446.htm>.

^v Asia Maritime Transparency Initiative, "Sandcastles of Their Own: Vietnamese Expansion in the Spratly Islands," <http://amti.csis.org/vietnam-island-building>.

^{vi} Department of Defense, "IISS Shangri-la Dialogue: A Regional Security Architecture Where Everyone Rises," May 30, 2015, <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1945>.

^{vii} James Hardy and Sean O'Connor, "China Advances with Johnson South Reef Construction," IHS Jane's Defence Weekly, September 19, 2014.

^{viii} James Hardy and Sean O'Connor, "China Building Airstrip-Capable Island on Fiery Cross Reef," IHS Jane's Defence Weekly, November 20, 2014.

^{ix} Ian Sundstrom, "Another Unsinkable Aircraft Carrier," Centre for International Maritime Security blog, January 16, 2015, <http://cimsec.org/another-unsinkable-aircraft-carrier/14349>.

^x Xi Zhigang, "Is China's Forward-based Airport in the South China Sea Set for Fiery Cross Reef?", *China Newsweek*, October 16, 2014, <http://news.inewsweek.cn/detail-1029-1.html>.

^{xi} Kenneth Katzman, Iran's Threat to the Strait of Hormuz, CRS Report R42335, <https://fas.org/sgp/crs/row/R44072.pdf>.

^{xii} Ronald O'Rourke, China Naval Modernization: Implications for U.S. Navy Capabilities, CRS Report RL33153, <https://www.fas.org/sgp/crs/row/RL33153.pdf>.

^{xiii} Jun Osawa, China's ADIZ...: A Great Wall in the Sky, 17 Dec 2013, <http://www.brookings.edu/research/opinions/2013/12/17-china-air-defense-identification-zone-osawa>

^{xiv} Ibid.

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