



The 21st Century modernization of China's PLA vis-à-vis the Neighborhood and the USA

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Abstract:

[Modernization of the People's Liberation Army (PLA) is a potential signal towards protecting China's national interest at home and abroad. The first fold of the Chinese development is that, within the next decade, the PLA primarily focuses on improving naval, air, and missile and space capabilities. PLAN on the other hand would solely concentrate on the expansionist operations in the Pacific and the Indian Ocean. Apart from the PLA's military modernization programs, China, under Xi Jinping is likely to create military strategic guidelines for the PLA. The second fold of the Chinese developments is the robust military modernization of the PLA that represents a contrasting facet to the tall claims made by China in so far as its 'peaceful rise' campaign is concerned. Based on the above mentioned 'modernization' and ensuing analysis, one is confronted with a piercing question— why is China strengthening its military? The primary intension of the PLA is to first, take control over the historic claims of the 9 dash lines (as mentioned in the map published by China in 1990), conquer the Asia-Pacific and the Indian Ocean region and second, to counterbalance the West, particularly USA. From this ground reality, this paper aims to draw an analysis of the growth and development of China's PLA and necessarily concentrates on the long-drawn regional security imbalances.]

Keywords: *China, Indian Ocean, ASEAN, Asia-Pacific, Modernization of PLA, 9 dash lines.*

Introduction:

Since 1990's, the Chinese People's Liberation Army (PLA) Allen K., 2002: 24 have been engaged in the development of their military capabilities. Such developments were triggered off due to the repeated victory of the United States in the Operation Desert Storm (Iraq) in 1991, US involvement in the Taiwan Strait Crisis in 1995-1996 and most importantly, the US military intervention in Kosovo in 1999, during which the US accidentally bombed the Chinese Embassy at Belgrade. Preceding such incidents, the Chinese leaders invested heavy resources for the transformation of the PLA into a modern and an operationally capable fighting force. The process of modernization of the Chinese PLA has covered over two decades, but the recent improvements of the PLA indicate that the modernization process has steered up for the political developments at home and abroad. In the recent years, China has made extensive efforts to increase the capable equipments of the PLA such as the modern multi-mission surface ships, advanced submarines, modern fighter aircrafts, conventional cruise and ballistic missiles, including an Anti-ship ballistic missile (ASBM) to target the US aircraft carriers. Some scholars are of the view that the Chinese efforts are immense in improving the standard of the PLA's command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems and its space and cyber warfare capabilities (for example, Pollpeter, 2012, and Tellis, 2007). Other researchers have studied the Chinese transition to a more-credible nuclear deterrent force. Further, a number of studies have addressed improvements in PLA —software, such as in the areas of personnel quality, education and training, and joint operations capabilities

(for example, Ayuso and Henley, 2014). On the flipside, the west is of the belief that the Chinese PLA, although powerful, has their weaknesses. Although the strength of the PLA is quite visible, the war-fighting capabilities of the PLA in reality are under question, Chase et al. 2015: 1-2. A concrete military body backed by a robust economic platform portrays China's asserted claim of becoming an Asian superpower Chansoria, 2011: 16. Further, China's actions in showcasing its military capabilities in the current decade not only harps upon the modernization of the military structure but also raises the question as to why such rapid modernization of the military? The robustness of the PLA immediately contradicts the self declared —peaceful rise claims of China.

This paper aims to focus on the achievements and drawbacks of the PLA and its rapid modernization over the past two decades. 'Informatization' Chansoria, 2011: 49 has been the key to the growth of the modernization of the

Chinese PLA. Further, the paper will discuss separately the various wings of the PLA, particularly the PLA's Army, Air force, Navy, along with the Ground Forces. This comprehensive discussion will delve into an understanding as to why this forced robust modernization of the PLA has been undertaken by China by plunging into disputes continuously tried to enmesh China into the regional security equation.

This brief introduction will be followed by:

Section I- which is an exercise in stressing upon the understanding of the People's Liberation Army and their developments.

Section II-will tease out the robust advancements of the PLA affecting regional security.

Section I

Understanding the People's Liberation Army and their developments:

The PLA has undergone massive transformation since the 1990's. Interestingly, the PLA, at a certain point of time was referred to as the —Junkyard army‖ not only for its outdated equipment but also for its poor personnel quality, training services and other distractions that cropped up, such as massive corruption and engagement in commercial activities. The weaknesses of the PLA were well realized after the outcome of the First Gulf War. The conflict not only projected the triumph of the US and its impressive capabilities but also highlighted the weakness of the PLA along with the aim to modernize its warfare capabilities. In 1993, China issued a new set of military strategic guidelines to provide guidance and direction for the PLA. Scholars are of the belief that the PLA was unable to effectively execute its newly emerging doctrine for high-tech local wars. After observing the incapacities of the PLA, China came to a conclusion that a serious set of modernization of the PLA was perhaps highly required. Subsequently,

Washington's involvement in the 1995–1996 Taiwan Strait Crisis highlighted the potential for U.S. military intervention in a regional conflict, and the accidental bombing of the Chinese Embassy in Belgrade in May 1999 convinced Beijing it needed to accelerate its development of asymmetric capabilities to deter or counter the United States, Chase et al. 2015: 14-15.

Till the end of the 1990's serious modernization of the PLA was conceptualized but the accelerated efforts were put in action since the 2000's. It was observed that during November 2006, a Chinese submarine entered the vicinity of a US Navy aircraft carrier in the East China Sea. This act of China was perhaps to ensure that the PLA, particularly the naval forces could operate beyond the shores of China at any point of time C. Fred Bergsten et al.2008: 192. The most dramatic advancement of China was during 2007 when Chinese ground based missile destroyed its own space satellite to illustrate the military vulnerabilities C. Fred Bergsten et al, 2008: 194 and kept its robust military advancements undercover.

These advancements revealed that the PLA was making substantial moves in order to stand out as a major military power. During the 1970's and the 1980's, China's military modernization was given the least position in Deng Xiaoping's —Four Modernizations| *Ibid*. In the present decade, the official military budget of China in the year 2013 was about \$119.5 billion Chase et al. 2015: 15. Scholars are of the belief that the actual military spending of China is higher than the announced figures. China's actual military spending in 2013 was more than \$145 billion. With such substantial resources, the PLA is now clearly becoming an increasingly professional and capable fighting force. The PLA has devoted considerable attention to modernizing its ground forces but the most notable improvements have come in China's naval, air, missile, space, and C4ISR capabilities. In recent years, China does not rely on imported surface ships and produced a number of classes of modern surface combatants, including guided missile frigates (FFGs) and guided missile destroyers (DDGs) with greatly improved anti-surface and anti-air warfare capabilities. Along with improvements to its surface fleet, the modernization of China's submarine fleet has focused on qualitative improvements resulting in a more-modern and – capable undersea warfare force. In addition, China commissioned its first aircraft carrier in

September 2012 Chase et al. 2015: 15. On the other hand, the PLAAF —will likely become a majority fourth-generation force within the next several years|. Moreover, China is also developing fifth-generation fighter capabilities, as reflected by its testing of the J-20 and J-31 stealth fighters. Over the next one decade, the PLAAF will introduce a number of other new capabilities into its inventory, improving its capabilities in such areas as large transport aircraft.

The future direction of China's strategic missile force is likely to include improving its longrange conventional strike capabilities with the deployment of such systems as conventional intermediate-range ballistic missiles (IRBMs). PLASAF can also be expected to strengthen its nuclear deterrence posture with the addition of more road-mobile intercontinental ballistic missiles (ICBMs), including new road-mobile ICBMs capable of carrying multiple independently targetable reentry vehicles. China is also likely to emphasize further development of its space and counter-space capabilities. China can be expected to continue expanding its space-based capabilities in such areas as ISR, communications, and navigation and positioning. In addition, China will likely continue to develop counter-space capabilities for strategic deterrence and to attempt to ensure its own ability to use space while limiting or denying an adversary's ability to do the same Kaufman and Mackenzie, 2009: 3-4. Moreover, as far as the PLA's strategy is concerned, China has conceptualized the promulgation of its military strategic guidelines and the revision and updating PLA doctrine under Xi Jinping. The expanding military capabilities of China's armed forces are a major determining factor in changing East Asian military balances; improvements in China's strategic capabilities have ramifications far beyond the Asia Pacific region Annual Report to Congress, 2007: 1.

Wings inside the PLA:

Unlike the Hu Jintao leadership, the Xi Jinping leadership has observed a wide range of reforms within the PLA. A huge amount of political capital has been invested largely on the development and improvements of the PLA. Further, efforts have been made by Jinping to improve partymilitary relations. Initially in the Gutian Conference in November 2014, top 420 officers in the PLA were lectured about the absolute control of the PLA by the Chinese Communist Party. This idea itself left grounds for internal corruption which was realized later and led to another conference of the *Central Military Commission Opinion on Deepening Reform of National Defense and the Armed Forces* held on the 1st of January 2016. This conference concentrated largely upon perfecting the party-military relation, particularly emphasizing on the need for more improvement. The analysis of the idea of 'more improvement' clearly harps on the idea of anti-

corruption Mulvenon, 2015: 49, which was perhaps not realized by Hu Jintao when he mentioned in 2007, —*we must take both economic and national defense development into consideration and make our country prosperous and our armed forces powerful while building a moderately prosperous society in all respect*” C. Fred Bergsten et al: 196.

With around 2 million active personnel, PLA is the world's largest military Geneva, 2015: 1. The four wings within the body are as follows:

1. The People's Liberation Army (PLA)
2. The People's Liberation Army Navy (PLAN)
3. The People's Liberation Army Air Force (PLAAF)
4. The People's Liberation Army Rocket Force (PLASAF)
5. The People's Liberation Army Second Artillery Corps, Kaufman and Mackenzie, 2009:3-4

The fundamental principles that PLA would adhere to, are as follows-

1. Safeguarding national sovereignty, security and territorial integrity, and supporting the country's peaceful development.
2. Aiming to win local wars under the conditions of informationization and expanding and intensifying military preparedness.
3. Formulating the concept of comprehensive security and effectively conducting military operations other than war (MOOTW).
4. Deepening security cooperation and fulfilling international obligations.
5. Acting in accordance with laws, policies and disciplines Cordesman and Yarosh, 2012:14.
6. The PLA, in its present phase of modernization has also adopted the ability to coordinate contingency plans and enable planning for a broad range of scenarios.
7. The PLA has also concentrated on the infrastructure building of the C4ISR in this recent modernization phase in order to match up with the US capabilities Thompson, 2009: 50.

Development at a faster pace since 2006

In 2006, China had deployed roughly 900 mobile CSS-6 and CSS-7 short-range ballistic missiles to garrisons opposite Taiwan, expanding at a rate of more than 100 missiles per year. The new version of these missiles has improved range and accuracy.

Naval power

China's naval forces included 72 principal combatants, some 58 attack submarines, about 50 medium and heavy amphibious lift vessels, and approximately 41 coastal missile patrol craft.

China received the second of two Russian-made SOVREMENNYI II guided missile destroyers (DDG) in late 2006. These DDGs are fitted with anti-ship cruise missiles (ASCMs) and widearea air defense systems that feature qualitative improvements over the earlier SOVREMENNYI-class DDGs China purchased from Russia. China took delivery of two KILO-class submarines from Russia, completing a contract for eight signed in 2002. China operates twelve KILOs, the newest of which are equipped with the supersonic SS-N-27B ASCM, and wire-guided and wake-homing torpedoes. The PLA Navy's ship, the LUZHOU class (Type 051C) DDG is designed for anti-air warfare. It had been equipped with the Russian SA-N-20 SAM system controlled by the TOMBSTONE phased-array radar. The SA-N-20 more than doubles the range of current PLA Navy air defense systems marking a significant improvement in China's ship-borne air defense capability. The LUZHOU-class DDG complements the LUYANG I (Type 052B) and LUYANG II (Type 052C) DDGs. The LUYANG I is fitted with the Russian SA-N-7B GRIZZLY SAM and the YJ-83 ASCM. The LUYANG II is fitted with an air defense system based on the indigenous HHQ-9 SAM. In 2006, China began producing its first guided missile frigate (FFG), the JIANGKAI II (Type 054A). The JIANGKAI II has been fitted with the medium range HHQ-16, a vertically launched naval surface-to-air missile currently in development. At the 2006 Zhuhai Air Show, PRC military and civilian officials asserted China's interest in building an aircraft carrier Cordesman and Yarosh, 2012: 49.

Air force

The PLA Air Force (PLAAF) had deploying the F-10 multi-role fighter to operational units. Chinese aircraft are armed with an increasingly sophisticated array of air-to-air and air-to-surface weapons, satellite and laser-guided

precision munitions, and cruise missiles. The Z-10 fires the Red Arrow 8E anti-tank guided missile, offering combat performance equal to the Eurocopter Tiger, but below that of the AH-64 Apache. Improvements to the FB-7 fighter program has enabled this older aircraft to perform nighttime maritime strike operations and use improved weapons such as the Kh-31P (AS-17) anti-radiation missile and KAB-500 laser-guided munitions. S-300PMU-2 surface-to-air missile systems. With an advertised intercept range of 200 km, the S-300PMU-2 provides increased lethality against tactical ballistic missiles and more effective electronic countermeasures. China also is developing the indigenous HQ-9 air defense missile system, a phased array radar-based SAM with a 150 km range Cordesman and Yarosh, 2012: 49.

Ground Forces

China had about 1.4 million ground forces personnel with approximately 400,000 deployed to the three military regions opposite Taiwan. China has been upgrading these units with tanks, armored personnel carriers, and additional artillery pieces Cordesman and Yaarosh, 2012: 48.

PLA Second Artillery Corps

The PLA Second Artillery Corps is the backbone of China's strategic forces. This involves nuclear counter-attacks, precision strikes with conventional missiles. In order to enhance the capability of this particular wing, China has necessarily enhanced the importance of Research and Development along with informationization of missile systems and supporting equipment for command, communications and reconnaissance. The Second Artillery force is accelerating its growth by building a missile operational system that is suited for informationized warfare. Further, in order to build the missile operational system, this particular wing has created integrated data bases for field support and informationized management platforms for logistic materials and improved support systems for the survival of combatants in operational positions Chansoria, 2011: 49, Stokes et al, 2011:2.

Section II

Advancements of the PLA:

There have been primarily two reasons for the Chinese defense improvement:-

First, to counter the western forces and trying to shape regional security.

Second, to claim or according to the Chinese, reclaim its territories within the region to eventually shape regional security.

The Chinese government maintains that its maritime rights extend to virtually the entire South

China Sea and often portrays this claim using a —nine-dash line that covers much of the South China Sea area. At the same time, Beijing is ambiguous about the unambiguous meaning of the nine-dash line; till date, China has not clarified the meaning of the nine-dash line or its legal basis. In November 2012, China also added a map which contained the nine-dash line to all of its new passports. This action of China immediately attracted negative responses from the countries within Asia-Pacific. China's increased reference in official government materials to the nine-dash line is a source of concern to its neighbors and other nations because, at a minimum, it creates an impression that China is not merely claiming all the land features within the nine-dash line, but it may also be claiming a special sovereign status of all the water and the sea-bed Cordesman and Yarosh, 2012: 40. Further, the Chinese have also used its paramilitary and particularly its Coast Guards to patrol the waters encircling the nine-dash line. China justifies this act, as modernization of the PLAN by creating maritime tensions in the disputed areas

Cordesman et al, 2015:131. In 2012, at the National People's Congress session, Liu Cigui, director of the State Oceanic Administration strongly mentioned that law enforcement activities would continue in the South China Sea. Further, he also stated that regular patrol activities would continue covering all the maritime zones under its jurisdiction. Interestingly, patrolling activities around the self-acclaimed area of the nine-dash line was particularly mentioned by Liu Cigui which created a serious tension in the regional security *Ibid*. Two significant years for China were 2013 and 2014. A 10th line near the northeastern part of Taiwan was included in the official map of China in 2013 which immediately raised a debate as to how this inclusion would improve China's claims over the South China Sea. It has been perceived that China was perhaps trying to portray mirror image symmetry of its own territorial claims with that of Taiwan, thereby narrowing the cross-strait gap. Further, by including the 10th line near the

northeastern part of Taiwan, China also restrained US and the other powers' ability to enter into military operations over the independence of Taiwan. This particular maritime strategy of China also enabled the country to secure some of its wealthy cities and areas such as Guangdong and Shanghai Chansoria, 2011: 27. In 2014, the official map of China was revised and the nine-dash line was turned into ten-dash lines where the islands of Paracels and Spratly were included Cordesman et al, 2015 :132.

The second issue that created a havoc in the Asia-pacific region was the Chinese claim over the Senkaku Islands (what the Chinese refer to as the Diaoyu Islands) in the East China Sea, territory also claimed by Taiwan and Japan. In addition, in September 2012, China began using improperly drawn straight baseline claims around the Senkaku Islands, adding to its network of maritime claims inconsistent with international law. Another attempt that was made by the Chinese was to extend and strengthen its powers beyond the —second-island chain which is primarily an arc that includes Japan through Guam, Northern Australia as well as Indonesia Chansoria, 2011: 28. The above idea of the island-chain control was the brainchild of the

Chinese Admiral Liu Huaqing, who masterminded China's modern naval strategy in 1982. The strategic plan set by China was to conquer the first stretch of islands ranging from the Aleutians to the Philippines, containing Taiwan and Okinawa by 2010 and the second island stretch by 2020. The US control of La Perouse Strait, Tsugaru Strait, and Tsushima Strait enables the US military to react to the Chinese provocations rising out of these islands and also defend its own air and naval base of Guam. This particular strategy of the US has accelerated China's ability to dominate Indian Ocean and the western Pacific region by 2040, as perceived by Liu Huaqing in

1982. USA is of the opinion that China's perception to deter US military dominance over Indian Ocean and the Western Pacific would be by using aircraft carriers, which is the strongest component of the Chinese forces. Further, The Department of Defense (DoD) approach to China is part of a broader U.S. strategy for the Asia-Pacific region that is primarily aimed at building a stable and diversified security order, an open and transparent economic order, and a liberal political order. U.S. policy toward China is based on the premise that it is in both countries' interests to expand practical cooperation in areas where both countries' interests overlap, and to constructively manage differences. Sustaining the positive momentum in the military-to-military relationship supports U.S. policy objectives to encourage China to uphold international rules and norms to contribute to regional and global problem solving.

DoD seeks to continue building a military-to-military relationship with China that is sustained and substantive, while encouraging

China to contribute constructively to efforts to maintain peace and stability with the United States, our allies and partners, and the greater international community. As the United States builds a stronger foundation for a military-to-military relationship with China, it must also continue to monitor China's evolving military strategy, doctrine, and force development, and encourage China to be more transparent about its military modernization program. China's limited transparency on matters relating to its military makes it more difficult to observe and evaluate factors that contribute to or detract from China's military capability. U.S. officials regularly urge China to be more transparent about its military activities Rinehart, 2016:31-32. If the military-to-military relation is nurtured, the United States will continue adapting its forces, posture, and operational concepts to maintain a stable and secure Asia-Pacific security environment Annual Report to Congress, 2015: 64.

On the flipside, a change of attitude of China has been observed in the recent years where the country feels that the US military-to-military strategy is a strategy in itself to curb the developments of the PLA Guinness and Mastro, 2016: 143. Therefore, China is continuing its efforts to conquer both the airspace and territorial waters of most Pacific islands. Apart from the Senkaku/Diaoyu Islands and the Philippines' Scarborough Shoal, China has also asserted its claims on Mischief Reef which is internationally recognized as part of the Philippines. This has been claimed as violation of International Law, but from the Chinese point of view, this particular illegitimate claim was perhaps easy because of the fact that Philippines lack both airforce and naval capabilities to confront the Chinese forces Cordesman et al. 2015: 134.

The third territorial dispute is associated with the East China Sea contains approximately seven trillion cubic feet of natural gas and up to 100 billion barrels of oil Whiting, 1996: 600. Japan maintains that an equidistant line from each country involved should separate the EEZs, while China claims an extended continental shelf beyond the equidistant line to the Okinawa Trench

(which almost reaches Japan's shore). In early 2009, Japan accused China of violating a June 2008 agreement providing for joint exploration of oil and natural gas fields, and claimed that China unilaterally drilled beneath the demarcation line, extracting reserves from the Japanese side. China, Japan, and Taiwan continue to dispute possession

of the nearby Senkaku Islands. On the flipside, in 2011, the Obama Administration initiated its policy of —strategic rebalancing to the Asia-Pacific region, partly to reassure allies about strength of the U.S. military presence in East Asia and to prevent conflict through enhanced deterrence.¹⁵² The State Department and DOD developed frameworks to enhance significantly the security relationships with Australia, the Philippines, Japan, and South Korea. In addition to bolstering treaty alliances, the United States has enhanced its security cooperation with other countries in the region, notably Malaysia, Singapore, and Vietnam, alongside efforts to engage constructively with China. In May 2015, Secretary of Defense Ashton Carter announced the five-year, \$425 million Southeast Asia Maritime Security Initiative, a new capacity-building effort focused on improving maritime law enforcement and information sharing in Southeast Asia. The United States has sold arms and other defense equipment to Taiwan, partly in response to China’s improving military capabilities and the cross-strait military balance, according to reports Rinehart, 2016:31.

A 2012 DOD strategic guidance document¹⁵³ and DOD’s report on the 2014 Quadrennial Defense Review (QDR)¹⁵⁴ state that U.S. military strategy will place an increased emphasis on the Asia-Pacific region. This increased emphasis constitutes the military component of the strategic rebalancing to the Asia-Pacific region that also includes economic and political components. In 2012, DOD announced that 60% of U.S. Navy vessels will be based in the Pacific theater by 2020, shifting from the previous 50/50 split between the Pacific and Atlantic theaters.¹⁵⁵ The U.S. military has arranged for additional deployments of U.S. forces on a rotational basis to U.S. allies Australia, the Philippines, and South Korea. DOD states that it will deploy its most advanced defense platforms (for example, the F-35 Joint Strike Fighter and the Zumwalt (DDG-1000) class destroyer) to the Asia-Pacific region before other areas *Ibid: 32.*

Concluding Analysis:

The rise of China’s PLA has been debated and questioned by various scholars on the grounds that whether it is actually detrimental or not. It has been observed that the attitude of China had changed over the years on the grounds that it has a lot of stakes in the Southeast Asian region. If the attitude of China is not mellow enough then the stakes of the country will get affected. As a result of this, Chinese attitude started melting. For example the devaluation of the

Yuan caused the financial crisis of 1998 in Southeast Asia. It was soon realized by the Southeast Asian nations that China is a major factor as far as the economic front is concerned for the entire Southeast Asia. ASEAN as a regional organization's presence is enough to pacify the attitude of China from a hegemon to a major player. Therefore, the western idea of enmeshing China into the regional political framework from an institutional point of view became the best idea to engage China into the political and most importantly, the economic framework of ASEAN. However, a change of attitude has been observed as far as China is concerned in the present period. China has changed from a mellowed player to a more aggressive hegemon in the region. From a realist point of view this change of attitude can be associated with China's ambitions to proliferate in the region through its PLA. However, it has to be noted that China's ability to project combat power depends on coordination across all domains—air, land, sea, space, cyber, and electromagnetic—of military power, and the PLA recognizes that it must enact organizational and training reforms to achieve the level of joint operational capability to which it aspires. The implications of this are as follows:

- The objective of improving the PLA's ability to conduct integrated joint operations must dominate plans for organizational restructuring and training reforms, and a joint operations capability must be realized sooner rather than later, to ensure that the PLA will be able to deter or, if necessary, win future informatized local wars.
- The PLA's ability to realize the objective of being able to conduct truly integrated joint operations depends on a higher level of technically and operationally capable personnel and leadership Chase et al, 2015: 20-21.

Further drawbacks as far as the personnel recruitment is concerned falls under serious question and the assumption that can be made out of the problem are as follows:

1. China's military personnel system will continue to be plagued by undertrained and inexperienced officers and men in the areas of modern combat, which will impede the force's ability to apply modern equipment and concepts effectively in line with China's concepts for force employment in future joint operations.
2. The cycle of retraining will continue following the training and recruitment rotation, which will inhibit the establishment of combat capability.
3. For the short to medium term, the cadre of officers will remain ill-trained and inexperienced to transform combat power as rapidly and decisively as senior leaders wish Chase et al, 2015: 81.

Although the modernization of the PLA remains a major factor in the realm of international relations, it is also assumed that the realist bent of China at present will not allow it to use nuclear weapons in the warfare. Chinese leaders do see the strategic utility of nuclear weapons as declining; the leaders may choose to emphasize other aspects of strategic deterrence—such as long-range conventional strike, counter space or cyber warfare capabilities—more heavily than nuclear forces Thompson, 2009: 34.

In the final analysis, China's rise, although claimed as detrimental, remains to be under question. The PLA has made impressive progress in a relatively short time. It is clearly becoming a more professional and more capable military. Its capabilities aimed at deterring or, if necessary, countering U.S. military intervention in the Asia-Pacific region, including systems designed to hold U.S. military bases, aircraft carriers, space systems, and computer networks at risk, are becoming an increasingly serious cause for concern among defense analysts in the United States Chase et al. 2015: 8. Further, with the advancement of information and technology, the PLA has created an Integrated Network and Electronic Warfare (INEW) doctrine to organize and structure its forces for seizing information supremacy. Almost all of the PLA's 2013 exercises focused on operating in —informationized conditions, a concept that can be viewed as the Chinese corollary to U.S. network-centric warfare. In order to enhance the capabilities of this field, China has essentially concentrated upon enhancing the quality of weapons along with information capabilities by linking geographically dispersed forces and harped upon an integrated system which is capable of unified action. More specifically, China has in the recent years adopted the policy of —information blockadefor national security concerns. In order to enhance this policy, China is constantly developing electronic and information warfare capabilities, including denial and deception, to defeat those of its adversaries. Further, this policy has also enmeshed the areas of cyberspace and outer space to deny information superiority to its adversaries Cordesman et al, 2015: 120. On the flip-side, the US signed the Presidential Policy Directive 20 in 2012, when the country felt that the country was facing cyberspace threats. US official had said in 2010 that network inspections had —found software tools left behind that could be used to destroy infrastructure components following hacks from China and Russia. Chinese state-sponsored hackers attacked one company with remote access to over 60% of gas and oil pipelines in North America. In order to curb the cyber threats, China and the US held high-level military talks in 2013. Several cyber theft allegations flowed in from the US and a constant denial of such activities were carried out by China. The Obama

administration, 2015, revealed that around 19.7 million Americans suffered from the cyber attacks which were primarily coming in from China *Ibid*: 124. This particular issue of the cyber-warfare therefore seems clear that the Chinese warfare modernization since 2013-2015 has become a challenging issue for the US.

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Abbreviations:-

1. People's Liberation Army (PLA)
2. People's Liberation Army Navy (PLAN)
3. Anti-ship ballistic missile (ASBM)
4. Command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR)
5. Guided missile frigates (FFGs)
6. Guided missile destroyers (DDGs)
7. Intermediate-range ballistic missiles (IRBMs)
8. Intercontinental ballistic missiles (ICBMs)
9. The People's Liberation Army Air Force (PLAAF)
10. The People's Liberation Army Rocket Force (PLASAF)
11. Military operations other than war (MOOTW)
12. Anti-ship cruise missiles (ASCMs)
13. Exclusive Economic Zone (EEZ)
14. Tactical nuclear weapons (TNWs)
15. Line of Control (LoC)
16. United States of America (USA)

