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AN ANALYSIS OF THE CAPABILITY, OBJECTIVE, AND IMPLICATIONS FOR THE
PEOPLE'S REPUBLIC OF CHINA (PRC) TO ENGAGE THE UNITED STATES IN
MILITARY WARFARE

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By

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ABSTRACT OF THE THESIS

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This paper examines the potential likelihood a conflict between China and the United States could occur in the next couple years. There are several matters that could bring on this scenario, but most of them revolve around Taiwan and their pursuit of independence. China continues to modernize their military ability, doctrine and assets based off the U.S and their military capability in and around the Strait. International Experts, Top Military Leadership and U.S Politicians think China's rapidly growing capabilities are a major risk to National Security, stabilization in the Pacific and geopolitical shift in the entire region.

This research will utilize the Lockwood Analytic Method for Prediction (LAMP) to analyze actions by both major actors based upon a trigger point that both countries feel is the utmost importance (Taiwan actions). Historical and modern data will be collected to predict possible courses of action and intent, and how these actions will dictate alternate futures in each scenario. This study concludes that the probability of military conflict between China and the United States in each of the established scenarios is medium to high.

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“Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat.” –Sun Tzu (512 BC)

I. Introduction

China’s military modernization, foreign alliances and investment in undeveloped countries like Africa make them a prime candidate to become the major superpower in a matter of years. Before this feat occurs, the United States Government and intelligence community will have to do some major war gaming, analytical scheming and conduct serious observation methods to identify potential indicators of a preemptive, reactive or cold war scenario. While the United States has been involved in numerous conflicts over the past thirty years, China has observed those military operations and found ways to combat key components from those operations, while simultaneously adapting key elements to enhance their war fighting capability.

During this timeframe of U.S dominance, the People’s Republic of China (PRC) has developed some of the most advanced Surface to Air Missiles (SAMS), fourth generation fighters, and indigenous produced equipment that the U.S military is not close to comprehending. Those advances include Intercontinental Ballistic missiles (ICBMs) with multiple reentry vehicles, anti- ship cruise missiles and anti-satellite weapons. The intelligence community (IC) has been caught off guard by a number of these accomplishments. Now the questions lingers, “could the U.S be caught off guard by an impending threat of military action? Or even worse can the U.S military be caught off guard by a nation they swore to protect? If Taiwan decides to seek independence, it could be dragging the U.S into a fight that they are not able to win.

The IC must step up its pursuit to gain further knowledge on potential indicators as they pertain to China, and where Taiwan stands in this whole situation. While the U.S continues to wage war against non conventional foes, China watches and prepares their military for the day

that the U.S is not capable enough to defend the small island across the Strait. This study seeks to identify if China possesses the capability or desire to engage the U.S in military warfare.

Although the U.S. is considered by many as the only SuperPower, severe problems within the economy, military cuts, and political turmoil have put the U.S at a sudden disadvantage to China's technological and modern advances. China still has major deficiencies but understands the country's size, significant population, and geographical location will make up for most of those inefficiencies. There are many factors that currently drive a wedge between the U.S and China, some direct interaction between the states, while others involve indirect acts through alliances, agreements and PACTS. Other state actors like Iran and their pursuit of nuclear weapons could further cripple the United States' military or economy and accelerate a potential war between the two major players (United States and China), but the most likely conflict scenario remains Taiwan in my opinion. This is why the research will be based around the U.S and China as the key actors with Taiwan as the trigger point for all courses of action.

II. Statement of Problem

This study examines the likelihood that China has the capability or desire to engage the United States in a military arena. The proposal will attempt to highlight the growing capability of the PRC modern technology and military capacity, along with areas of concern from the U.S. standpoint. The Research will identify various hazards associated with the Chinese military as they continue to pursue an elite status and how the action of Taiwan could alleviate that process. This study acknowledges there are several circumstances that could pit the U.S and China toward one another on the battlefield; some of those circumstances include Cyber attacks on strategic assets, espionage or possible conflicts with rogue nations like Iran or North Korea, but those situations have occurred and will not test the countries like the Taiwan Strait crisis. Literature on the past

Taiwan Strait scenario, both countries' histories and present stances will be examined and discussed as a means to predict future actions on what a conflict between the U.S and China would mean to everyone.

III. ACTORS, CAPES AND PERCEPTIONS

China

The purpose of the qualitative literature review is to gather information, data and possible perceptions as they pertain to the PRC's rise to power. In addition, this study will attempt to facilitate some critical thinking on the specific research questions beyond existing analysis, and avoid falling into the trap of mirror imaging, groupthink, and certain biases associated with predicting state actor's intentions. The data presented will represent the respective actors' view of the PRC as it involves the Taiwan Strait Crisis, ongoing cyber warfare and regional stability, while also discussing the elements of national power: economic, diplomatic, and military.

Annually the Office of the Secretary of Defense takes a comprehensive examination of China's Armed Forces, cyber warfare capes, equipment (SAMS AAA, Aircraft,etc), alliances and doctrine. This publication is intended to inform national leadership, allies and military experts on the emerging threat that rises in the Pacific. The article also has a variety of graphs and tables that will illustrate the military power possessed by the PRC. The pub highlighted "China's growing involvement in international peacekeeping efforts, counter-piracy operations, humanitarian assistance, disaster relief and their willingness to invest in trouble spots all over the world present a number of challenges for the U.S and allies.

China's 2010 Defense White Paper asserts that China's future and destiny have never been more closely connected with those of the international community. Nonetheless, China's

modernized military could be put to use in ways that increase China's ability to gain diplomatic advantage or resolve disputes in its favor.”¹ Those advantages gained around the world will take away influence and persuasion that is usually afforded by the United States. A later review will argue that point as it pertains to long-time ally Australia.

While the alliances are important in their own right, the study will focus on military equipment that could be utilized in any conflict with the U.S, particularly a conflict with Taiwan Strait. A situation involving the PRC advancement on the Republic of China (ROC) will lead to a large-scale war that could result in the next World War. While most analysts state that a conflict is unlikely, this study would like to highlight the massive amount of equipment and personnel that are centrally located directly adjacent from the nation of Taiwan.

Through the employment of both carrots and sticks, Beijing apparently seeks to deter Taiwan's moves toward independence and achieve eventual unification. The military component of China's Taiwan strategy is likely intended to create an impression on Taiwan that accommodation with China is ultimately in the island's best interest. This approach appears to include a heavy focus on amphibious operations, long range strike, and anti-access and area denial capabilities, which are intended to alter Taiwan's threat calculus as well as that of any party considering intervention in a cross-Strait crisis.”⁴ A quick reference of each military component within the People's Liberation Army will point out what danger lies ahead for all parties opposing China in the Strait conflict or other conflicts involving disputes in the region.

The Chinese High Command

The Chinese High Command (CHC) is the major decision-making body in China as it pertains to domestic and international courses of action. The CHC has undergone a dramatic

facelift in the past couple decades by pushing more of an open domestic policy, clearly defined strategic policies and far less former PLA officers occupying the command but still allowed a significant amount of input on major decisions. The CHC decision-making process is now based on an array of interrelated and sometimes competing strategic priorities, which include perpetuating CCP rule; sustaining economic growth and development; maintaining domestic political stability; defending national sovereignty and territorial integrity; and securing China's status as a great power.⁴ There are three intricate components of the CHC (Chinese Communist Party (CCP) who is superior to the CMC and PLA and make major decisions at all levels).

The CMC houses the Ministry of National Defense and they are similar to the Office of the Secretary of Defense because they specialize in military-related task that are governed and as a whole the responsibility of the civilian government rather than the armed forces. This includes foreign military relations, mobilization, recruitment, and civil support to military operations.⁴ The armed instrument of the CHC is the PLA, they have attempted to become more regularized and professional internally, in return, they have become much more appealing to the international community. The PLA went through the most dramatic makeover ever seen in China.

The 16th Congress was inaugurated in 2002 and saw appointments based off of merit and experience instead of favors among the party's elite. A vast difference from the party's past, where the top posts were filled as a result of considerable nepotism and after lengthy political jockeying, high-level changes in the military were the result of standardized procedures, meritocratic criteria, a well-defined candidate pool, and relative transparency. China and the PLA have evolved from a nation run completely by one central party (CCP) into two entities that have established a dialogue about state control of the military, a military that serves the nation,

not just the ruling party, and a military controlled by civilian rule and governed by legislative oversight.⁵

FIGURE 1: Chinese High Command



Sources: Data adapted from Office of the Secretary of Defense. 2011. Military and Security Developments: Involving the People's Republic of China

China understands that a number of countries that enjoyed harsh authoritarian/military rule (South Korea, Taiwan, the Philippines, Indonesia, Thailand, Bangladesh, and Pakistan) have been removed from political power and influence, made accountable to sovereign legislatures, and returned to the barracks.⁵

The PLA transformation in the political forum is not the only area in which they are aiming to improve; they have also adapted a five-year plan (11th one) that is set upon offsetting any military that could interfere with their plans and capabilities for a cross-Strait contingency and other maritime border disputes (Figure 2).⁵

Figure 2: China's Disputed Territories.



Sources: Data adapted from Office of the Secretary of Defense. 2011. Military and Security Developments: Involving the People's Republic of China

People's Liberation Navy

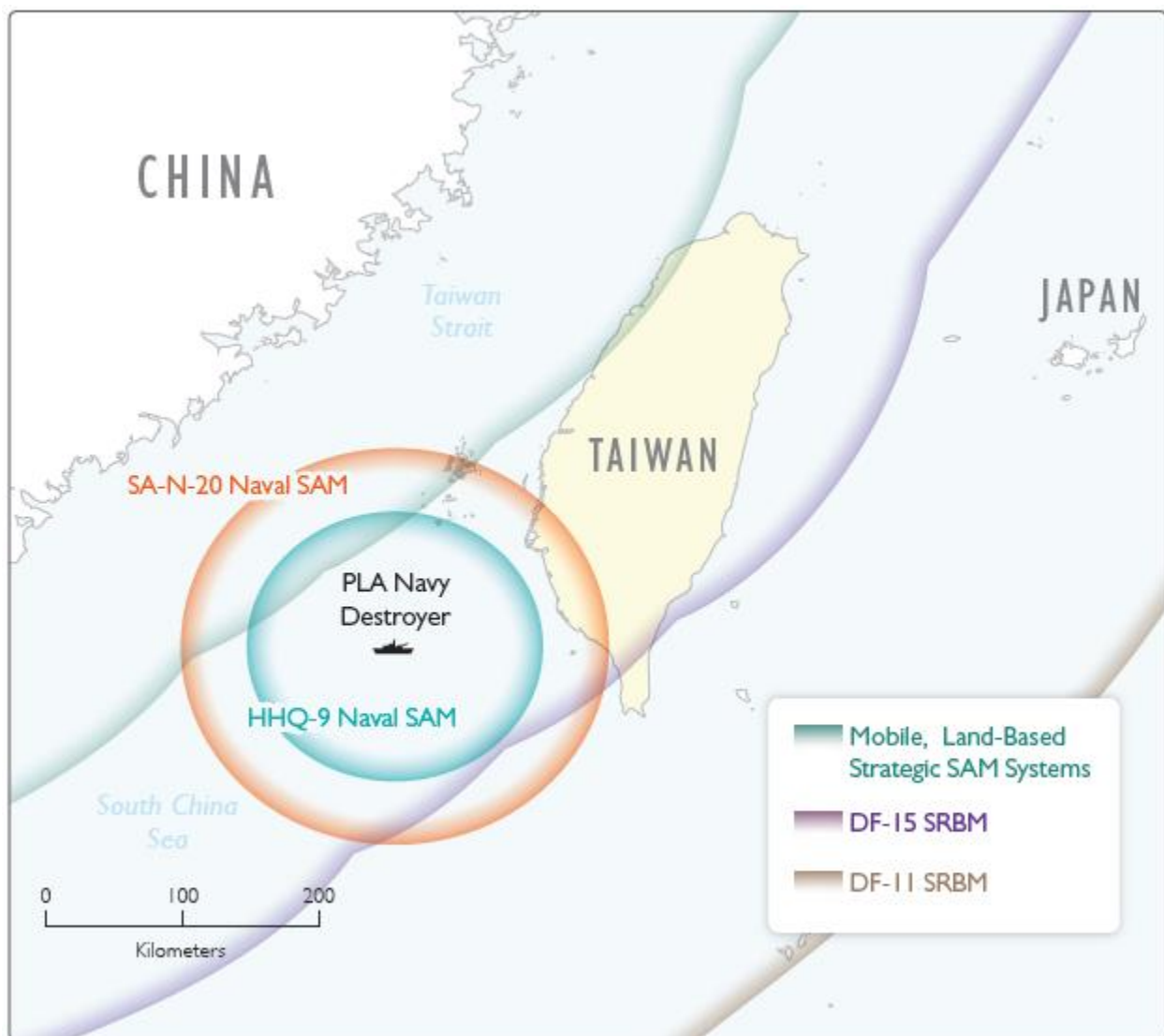
Since China is in the midst of several ongoing disputes, the PRC felt it was vital to build a sophisticated Naval Presence that could deter all regional adversaries and most importantly the United States Navy (USN) in a cross strait hostility. The PLAN has developed several tactics as it pertains to Taiwan and any interference from the USN. The different courses of actions developed by military experts within China have been developed to achieve different resolutions. Those courses of actions will be discussed later in the study as which will explore all possible situations that could arise.

China's focus on Taiwan has been the principal drive behind nearly two decades as the dominant force shaping PLA modernization. Although China's other emerging interests increasingly compete for attention and resources, defense planners continue to regard Taiwan as the PLA's primary mission. Beijing seeks the military capability to deter Taiwan moving toward independence. This mission has catalyzed efforts to deter, delay, or deny the possible intervention of U.S. forces in a cross-Strait conflict.⁴ China has certainly met the challenge of countering a Taiwan conflict, but the PRC is pushing to project global power, ensure regional stability and accomplish maritime capability that could only been rivaled by Russia and the U.S.

China's modernization of the navy seemed to be expedited by the lack of equipment / capability needed to successfully defend the PLAN against the United States' two aircraft carrier battle groups in the 1995-1996 Taiwan Strait Conflict. Beijing apparently anticipated that the United States might send one naval battle group to the vicinity of Taiwan, but was surprised when two were dispatched.⁶ U.S. military intervention highlighted the importance of developing a modern navy, capable of conducting anti-access and area denial (A2AD) operations.⁵ The PLA has since redefined their research and development in the Naval Equipment spectrum. They have

aggressively integrated the Navy and Air Force with major joint services exercises, developed destroyers that employ some of the world's most advanced SAMs (SA-N-20, HQ-9, etc) and most importantly, they have produced a carrier that began sea trials. All factors make for a very capable adversary that could face the Taiwanese and United States in a joint effort. Figure 3 illustrates the new obstacle that would need to be overcome in a strait conflict.

Figure 3: A2AD



Sources: Data adapted from Office of the Secretary of Defense. 2011. Military and Security Developments Involving the People's Republic of China

Both U.S and Taiwanese leadership see the Chinese naval maneuver of denying access as enormous hindrance on each country's ability to successfully defend the ROC. China's anti-access/area denial (A2/AD) capabilities extend well into the South China Sea (SCS). China asserts these military developments are purely defensive in nature and that it poses no threat to neighbors in the region. While they have refuted these reports on the true nature of A2/AD, Chinese newspapers have reported the procedure is much more complicated.⁷

The Straits Times/ Asia News Network Back published a detail article on the complexity of the maneuver and the actual name it is called by the PRC. The report went on to say that China does not use the term explicitly, but it is widely known that China's use of the term "shashoujian," or assassin's mace, is a rough equivalent to A2AD. Shashoujian involves using asymmetrical weapons to deter future U.S. military involvement in the Asia-Pacific region. Its key components include anti-satellite weapons, short- and medium-range missiles aimed at U.S. bases in Asia and relatively advanced anti-ship ballistic missiles (ASBMs).⁸

The PRC plan to deny access to the strait has military strategists in the United States, Taiwan and other regional allies asserting some true critical thinking skills to generate a counter. A few of those counters will be discussed later in the article while defining the United States as a state actor; it will also be mentioned in the courses of action section. While the Navy has developed at a record pace, they may still lag behind by decades compared to Chinese Air Force the growth.

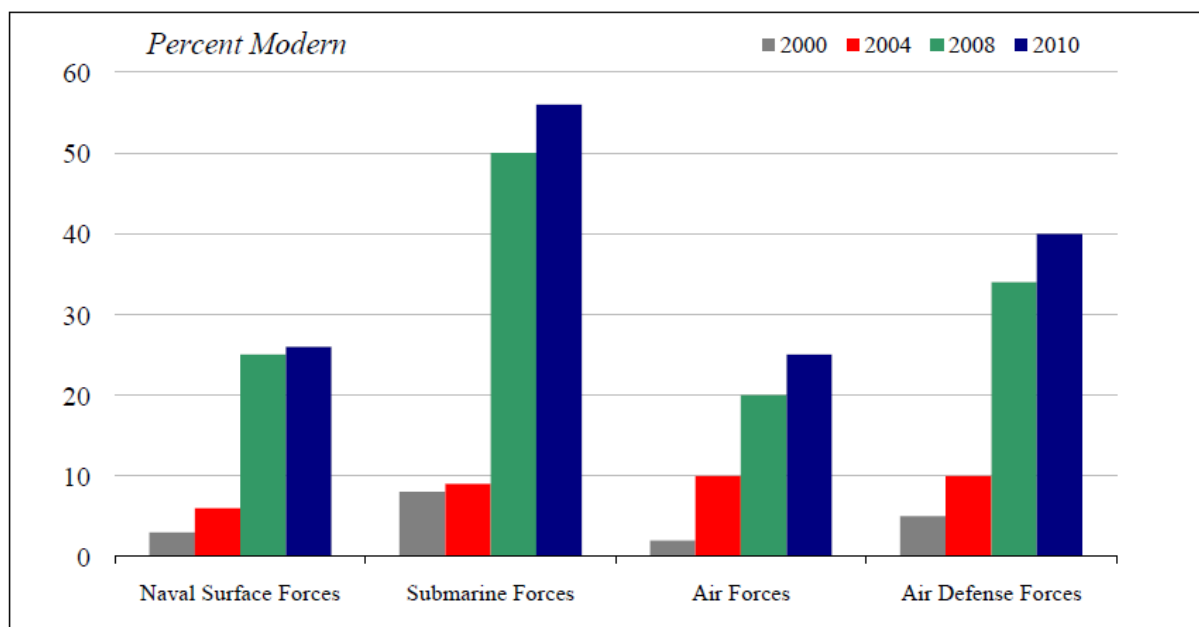
People's Liberation Air Force

The PLAAF has transformed from a primarily defensive Air Force that was often hesitant to engage an enemy (especially of the U.S caliber) over the Taiwan Strait to a more capable force

who has emphasized pilot proficiency, offensive attack and less reliance on ground control intercepts. China has also influenced commercial and military industries to produce indigenous aircraft, rather than await developments from Russian, French or American avionic experts.⁴

This production of these indigenous items is an direct result of the PRC leadership willingness to improve its Military and Security Developments Involving the People's Republic of China practices, streamline bureaucracy, shorten developmental timelines, and increase overall defense industrial production capacity.⁴ While production of indigenous equipment is up tenfold, China still relies heavily on foreign technology to equip the PLAAF. Most technology is based off of soviet production, but a large amount of it is gained through espionage, open source reporting, CNE, and targeted intelligence operations.⁴ See Figure 4

Figure 4: PLA Modernization



PLA Modernization Areas, 2000 – 2010. This graphic compares the expansion of modern operational systems within the PLA in 2000, 2004, 2008, and 2010.

Sources: Data adapted from Office of the Secretary of Defense. 2011. Military and Security Developments: Involving the People's Republic of China

The modernization numbers are significant considering the U.S and Taiwanese inventories are made up predominately of technology that was created before 1980; even the world's most advanced 5th generation fighter (F-22) technology was originated in the eighties. A comparison of PLAAF and Taiwanese Air Force will be presented in the next section.

To many observers, China seems to be well on their way of becoming a superpower that could carry out more operations to maintain stability and solidarity in the region, but to experts this grandiose perception is merely a smoke screen to captivate the international community. China will settle a score that arose the moment the Kuomintang clan fled to Taiwan to seek independence. One would be hard pressed to convince the Taiwanese government that most of the PRC's military buildup is not based on a possible Taiwanese conflict. The study will take a look at their capabilities, intentions and ability to determine a number of possible actions that could accelerate a Strait conflict and how they could possibly counter the inevitable.

TAIWAN

The Taiwanese government is often referred to as the Republic of China, and in their hearts and minds they are still the only legitimate Chinese government. Those sentiments and political actions have brought the country ever so close to war with the PRC in the past, but currently the two nations enjoy a much improved and expanded relationship. Yet the eroding cross-Strait military balance must be redressed so that Taiwan can approach the political dialogue from a position of confidence, instead of intimidation.⁹ When a country feels intimidated or outnumbered, it usually attempts actions that could support those passions. The PRC currently holds the international community support, political influence and most importantly, the ability to drop the hammer whenever they sense the ROC is going out of its way

to seek independence. Some research into Taiwan's military capability and ability to counter this threat yielded some startling results. Below are a number of Graphs, Charts and tables that showcase the deficiencies that are faced by the point of contention (Taiwan) between the U.S and China, the major trigger point for any conflict that will take place between the two countries.

These graphs demonstrate the big disparity held by the PRC as it pertains to economy, landmass, population, military equipment, influence and allies. To be brutally honest, the Taiwanese government is outmatched, outmanned and out funded in every possible way (See Figure 5). To combat this, the U.S has considered selling the TAF some upgrades to the current F-16s inventory, as well as new F-16 C/D models, a gesture that means little to nothing on the combat side but saves face for them on their previous balk on selling the Island new jets, Which gives Taiwan assurance that the U.S is around for the long haul.

This section of the research will differ from the above section on China for a number of reasons. The government of Taiwan's main objective is to defend the island from invasion by the PRC (there is no ambition to become a regional or superpower). The U.S is essentially their naval presence (See Figure 6) with plans of having over 60 percent of USN assets in the pacific by 2020. Instead of foot stomping the shortage, this expose will compare the defining factors for both sides, the Air Forces. Air defense missions principally fall under the responsibility of the Taiwan Air Force (TAF or ROCAF). Headquartered in Taipei, the TAF currently comprises six fighter wings and a transport and airborne warning/electronic warfare wing, together with a number of surface-to-air (SAM) missile and air defense gun batteries.⁹

To complicate matters worse, the majority of the fighters in the inventory are outdated and can be outperformed by the majority of Chinese third generation aircraft (See Figure 7). Not

good news considering China is in the midst of producing 5th generation aircraft that won't even have to be utilized if the conflict were to stay between the two nations (China and Taiwan).

Figure 5: Taiwan Strait Military Balance

	China		Taiwan
	Total	Taiwan Strait Area	Total
<i>Personnel (Active)</i>	1.25 million	400,000	130,000
<i>Group Armies</i>	18	8	3
<i>Infantry Divisions</i>	17	5	0
<i>Infantry Brigades</i>	22	9	8
<i>Mechanized Infantry Divisions</i>	6	2	0
<i>Mechanized Infantry Brigades</i>	6	1	3
<i>Armor Divisions</i>	9	4	0
<i>Armor Brigades</i>	8	3	4
<i>Artillery Divisions</i>	2	2	0
<i>Artillery Brigades</i>	17	6	5
<i>Airborne Divisions</i>	3	3	0
<i>Amphibious Divisions</i>	2	2	0
<i>Amphibious Brigades</i>	3	3	3
<i>Tanks</i>	7,000	3,100	1,100
<i>Artillery Pieces</i>	8,000	3,400	1,600

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments Involving the People's Republic of China

Most of the PLA fighters are now employing Beyond Visual Range (BVR) air-to-air missiles, while the air defense jets Taiwan would scramble in response to an attack will not be equipped to survive such engagements. This is contingent on them even getting off airfields that could possibly be hit by Short and Medium Range Ballistic Missiles. The airfields have limited protection against the short range ballistic missiles with the Patriot Pac-3s but they must be reversed for employment versus thousands of TBMs, Surface to Surface missiles and AAA

pointed at the Island of Taiwan. They are also faced with a shortage of fire units for those systems.

Figure 6: Taiwan Strait Military Balance, Naval Forces

Taiwan Strait Military Balance, Naval Forces			
China			Taiwan
	Total	East and South Sea Fleets	Total
Destroyers	26	16	4
Frigates	53	44	22
Tank Landing Ships/ Amphibious Transport Dock	28	26	12
Medium Landing Ships	23	18	4
Diesel Attack Submarines	48	30	4
Nuclear Attack Submarines	5	2	0
Coastal Patrol (Missile)	86	67	61

Note: The PLA Navy has the largest force of principal combatants, submarines, and amphibious warfare ships in Asia. After years of neglect, the force of missile-armed patrol craft is also growing. In the event of a major Taiwan conflict, the East and South Sea Fleets would be expected to participate in direct action against the Taiwan Navy. The North Sea Fleet would be responsible primarily for protecting Beijing and the northern coast, but could provide mission-critical assets to support other fleets.

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments: Involving the People's Republic of China

Figure 7: Air Forces and Chinese Missiles

Taiwan Strait Military Balance, Air Forces			
China			Taiwan
Aircraft	Total	Deployed Within Range of Taiwan	Total
Fighters	1,570	310	388
Bombers/Attack	550	180	22
Transport	300	40	21

Note: The PLAAF and the PLA Navy have about 2,120 operational combat aircraft. These consist of air defense and multi-role fighters, ground attack aircraft, fighter-bombers, and bombers. An additional 1,450 older fighters, bombers and trainers are employed for training and R&D. The two air arms also possess roughly 300 transports and over 100 surveillance and reconnaissance aircraft with intelligence, surface search, and airborne early warning capabilities. The majority of PLAAF and PLA Navy aircraft are based in the eastern half of the country. Currently, 490 aircraft could conduct combat operations against Taiwan without refueling. However, this number could be significantly increased through any combination of aircraft forward deployment, decreased ordnance loads, or altered mission profiles.

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments: Involving the People's Republic of China

Figure 7.1: Air Forces and Chinese Missiles

China's Missile Force			
System	Missiles	Launchers	Estimated Range
ICBM	50-75	50-75	5,500+ km
IRBM	5-20	5-20	3,000-5,500 km
MRBM	75-100	75-100	1,000-3,000 km
SRBM	1,000-1,200	200-250	< 1,000 km
GLCM	200-500	40-55	1,500+ km

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments Involving the People's Republic of China

The figures above are meant to highlight the enormous task that lies ahead for the Taiwanese military in a potential OPLAN 5077 scenario. The TAF would never have the capacity to defeat the PLA, but as the United States comes to their defense, they need to be able to at least sustain momentarily until reinforcements make it to the Pacific. The lack of fighter aircraft, ballistic missiles and SAMS must be addressed if the U.S is to even make it into the ring.

United States

The United States plays a vital in Asia for a number of reasons. The first includes its binding agreement with the democratic nations in the region to secure the sea, air, and space domain. All three of those areas are in the midst of being snatched by the PRC and their modernized collection of Aircraft, Missiles and Satellites. There is one lone area (sea) that the U.S. is still considered the owner of at the present time.

Most experts would say the United States had it easy over the past third of a century in regards to China. Washington has been able to proclaim moral superiority over the Communist Party dictatorship in Beijing, even as those very dictators provided Washington with a stable, businesslike relationship that fostered immense opportunities for American companies in China

and for the American economy overall.¹¹ China was the underdog, therefore, any actions by adversary or ally in the region could be offset by the U.S military superiority.

These China-U.S cooperation opportunities mentioned above are slowly eroding as the U.S economy continues to struggle, and the Chinese economy flourishes. Then there is the current asymmetric war taking place in the Middle East in which the U.S and its NATO allies have struggled to gain a successful outcome. The most technological military in the world has not been able to predict, outwit or neutralize a far less powerful adversary that does not come close to the capacity, fortitude or technological ability of a conventional military like the PLA. This inability to replicate the actions of Desert Storm/Desert Shield has played into the psyche of the adversary and allies alike; an abrupt or brazen act by Taiwan twenty years ago would garner aggressive rhetoric, it may now garner a cross strait invasion.

The PLA observed a combination of precision guided munitions, rapid aerial maneuver, and information dominance during Operation ENDURING FREEDOM, and were conscious of how its employment changed the dynamics of ground combat.¹³ The PLA understands taking away these key elements from the United States Military essentially degrades them to a less than optimal force. The timing and effectiveness of U.S. operations in Afghanistan have had a profound effect on the PLA's own doctrinal concepts, equipment developments, and cross strait operational plans. The impact has been on its broader conventional forces doctrine, tactics and equipment, rather than more narrowly on COIN and how they could employ it against the U.S in a Taiwanese coalition effort.¹³

Because the U.S has sworn to uphold democracy, human rights and liberty, the PLA must look at all possible facets of a major Pacific conflict (even the limfacs associated with COIN). The Taiwan Relations Act of 1979 granted the U.S. an obligation to defend Taiwan or

make available to Taiwan such defense articles and defense services in such quantity as may be necessary to enable Taiwan to maintain a sufficient self-defense capability.¹² This Act will and has always has been the linchpin of U.S-Chino relations, and in many expert's opinion the Taiwanese scenario will be the gauge as to who will remain the ultimate military power in the 21st Century and beyond.

IV. LITERATURE REVIEW

The People's Republic of China has continued to develop equipment, a doctrine and procedures focused predominately on defeating the United States in a future conflict. Those pundits, lawmakers and intelligence analysts who have disregarded the extensive productions by the PRC as it pertains to electronic attack platforms (GPS jammers, LASER guided weapons, etc), anti-satellite weapons, extended range SAM systems and cyber warfare have displayed a common lack of Intelligence Analysis, similar to what was witnessed during the Cuban Missile Crisis, Pearl Harbor and the 9/11 attacks. The country would benefit significantly from focusing more resources, research and foresight into the up-and-coming threat that arises from the East instead of unconventional organizations that operate in the Middle East.

Although there is existing literature that focuses on the U.S-Chino relations, it varies on topics like economic and political ramifications existing in the relationship, with little centered on direct conflict and the war fighter's point of view (U.S or Chinese). There are a number of publications that highlight problems presented from an international viewpoint, but very little straightforward information on how the PRC is debating when and how to challenge the U.S via a Taiwan Strait conflict. This study seeks to prove that the PRC will in fact use that conflict as a catapult to their ultimate objective, becoming a major military superpower.

Current articles, reports, and publications contribute vital knowledge about the political, financial and self interest of the actors discussed throughout the study. Additionally, they provide valuable insight into nonconventional methods employed by the Chinese in the form of espionage, cyber warfare and space based weapons, as well as potential courses of action based on analysis by subject matter experts (SMEs). This paper intends to investigate the predictive aspect of China's ability, intent and objective in a major conflict presumably against the U.S. It will also further explore how the external and internal interests of China and the United States will coincide over a third party (Taiwan), who is now seeking independence from both parties, instead of one. While Taiwan and the U.S remain close allies, The ROC wants to be allowed the right to voice their opinion in the region without recourse, something that has and will continue to be condemned by the U.S administrations.

Teddy Ng provided thorough background information on how China's military-modernization program came to probation in 1990 following the first Gulf War. China admired the U.S operations that quickly defeated the Iraqi Army and decided Military reform was needed to compete with such ability. China not only adapted portions of the command and control elements, importance of precision guided munitions (PGMs) and air superiority, they also generated avenues of negating these aspects. Ng and other experts feel like the latter lesson is vital to sustaining or defeating the U.S military.

Ng suggested the military equipment was a great asset to the PLA but questioned if members could utilize its full capacity. While the article seemed to underline the abilities, it took a biased tone against the Chinese military and started to read like a political talking paper. Ng, a reporter for the "South China Morning" has the luxury of believing the PLA cannot fully operate

the advanced threats, while the U.S military does not. This present study will focus on the equipment and how it will be employed against an adversary like Taiwan or the U.S.

While Ng's article was a generalization of the entire PLA military, Doug Chowder's piece "Storm Warning" took a look at how politics between the People's Republic of China and the U.S are currently positioned, and how they are perceived to play out in the next couple of years. The article was geared heavily toward the growing People's Liberation Army Navy (PLAN) and how its ultimate goal is to develop a naval force that can project power similar to the United States Navy (USN), deter the USN and eventually defeat the USN if there was interference in a Strait crisis.

While this was great background on the current Naval abilities from the Chinese military standpoint, this editorial focused on the politics involved as it pertains to carriers and subs in the Pacific, instead of international implications as they aspire to project global power in and around any part of the world. This is a vital area of contingency for the PRC, as the USN stands to be the only component of the military that has a distinct advantage in a Taiwan Strait situation, while those advantages are being degraded by the day, there must be a synchronized effort to keep the USN as the top Navy presence in the world if they are to deter any full blown military action against Taiwan.

This sentiment of keeping the USN at the forefront of a Taiwan conflict has picked up a lot of traction the last couple of years, and has prompted the Chief of Staff to employ a plan they tag as the AirSea battle concept. For this scheme to reach its maximum potential, each of the services will have to put aside their "moderated parochial tendencies" and significantly enhance cooperative efforts, said Air Force Chief of Staff Gen. Norton Schwartz.¹⁷ That will mean utilizing complementary and cross-domain capabilities with common data links so that, for

example, Navy submarines may communicate with Air Force remotely piloted aircraft, or an F-22 can retarget a Tomahawk cruise missile launched from a submarine, a mindset really intended to guide the Air Force and Navy to unprecedented levels of collaboration and cooperation that will preserve US access to air and maritime commons. Air Force Chief of Staff General Schwartz stated that both departments are not thinking about things in the airman and sailors stovepipes, but attempting to connect the concept strictly to China's growing military prowess.¹⁷

This periodical in fact discussed the importance of winning the sea battle, developing and acquiring new weapons systems and making sure the U.S is making the best use of the current capabilities in a better way.¹⁷ This is a great start to improving the naval posture in the Pacific, but the article left out key details on how these measures will combat China's A2\AD plan. Other areas of warfare that should be focused upon involve the cyber spectrum, as well as space developments.

The SEcDev group conducted a 10-month investigation of alleged cyber espionage conducted by the Chinese government from June 2008-March 2009. The investigation confirmed the existence of the government's Ghostnet network, a network that infected at least 1,295 computers in 103 countries, of which 30% can be considered high-value diplomatic, political, economic and military targets. The Investigation did a wonderful job of highlighting the Chinese government's advanced cyber capabilities while also giving a detailed chart of what systems were compromised and for how long. While the article is a great spring point, it stops just short of identifying the PRC by name and possible motivations behind the constant attacks on U.S and allies' networks.

Bryan Krekel et al study was intended to be a detailed follow up and expansion upon a 2009 assessment prepared by the U.S.-China Economic and Security Review Commission. The

piece emphasized the intensified operations carried out by Chinese government and how those operations are potential risk to U.S interest. The review acknowledges that the China possess an extensive cyber operation that is linked to the government, military and even educational institutions. Left out of the article was the proper U.S response on how to counteract those capabilities. This is something that will be discussed extensively later in the study under the PRC's possible course of action section.

Daniel Gallagher article "10 Year Forecast Shows Big Rise in the Satellite Launches" was based on the amount of proposed satellite launches that will take place over the next decade, an estimated 1,145 satellites-worth 196 Billion dollars will be built and launched by 2020. The majority of those will belong to China, Russia and the United States. Gallagher believes this is one reasonable cause that a conflict between the United States and China will take place in space and cyberspace. The details of the satellites capabilities were not discussed, nor were the possible military utilization it focuses more on the economic motives attributed to those countries.

As highlighted in this literature review, the United States is currently in a vulnerable position, and the vulnerabilities are and will continue to be exploited by the PRC as they focus on taking the lead in all functions of the military continuum. Research indicates that maintaining the world's only true superpower is coming at a hefty cost, while problems persistent within the U.S military and some suggest isolation as a means to build up the force before a potential conflict with a military that processes similar capabilities. The PRC is generating international accolades and praise from allies and adversaries alike. Taiwan appears to be the only country who has not realized just how dangerous their capability may be, and if they did, there would not be any hasty moves to incite China. As experts review all capable facets of the PRC, their true

intentions are rarely discussed in great detail, especially as it pertains to the likelihood that the U.S will have to suffer a defeat for those accolades to approach full foresight.

V. RESEARCH DESIGN AND INSTRUMENTATION

China's courses of actions will be discussed quantitatively using predictive and explanatory analysis. A dataset will be created by examining historical, current and projected literature on China's military and economical development, as well as perspectives and courses of action by other pertinent national actors. These histograms, charts and graphs presented throughout the paper will focus on different facets of the Chinese military, economy and government. The Lockwood Analytical Method for Prediction (LAMP) is used for this study. By application of qualitative empirical data from a perceptual study of the national actors, specification of possible courses of action and determination of a major scenario, LAMP emphasizes prediction of the relative probability of alternate futures.¹

This section addresses the LAMP method, the twelve steps, limfacs, and analysis involved in producing a concrete outcome for the study. This outcome is based on collected data and should be accompanied with substantial facts to support the final hypothesis. There are essentially key elements that will account for all possible alternative futures. Each actor (China, U.S. and Taiwan) will introduce their own agendas or motives, In return these actions will influence or manipulate the results.² LAMP provides analysts, policymakers and military leaders a product that prevents potential biases, fallacies and group think that could occur when developing facts (most of the time these facts tend to be more perception based than anything), systematically comparing the possible outcomes with regard to the individual actors' perceptions, and thus arriving at the most likely alternate futures possible.³

The LAMP 12 step process is listed below.³

1. Define the issue for which you are trying to determine the most likely future: This is by far the most important step. If the issue is too broad, the analyst has too many actors and courses of action to consider, causing the number of alternate futures to explode exponentially. Find a predictive issue to study that ensures it is defined in such a way that the scope is limited to the primary issue.
2. Specify the national actors involved: The analyst should then determine the number of national "actors" who can directly affect this issue. Determine the few specific parties (nation-states, non-state actors, or organizations) with direct influence or interest in the issue.
3. Perform an in-depth study of how each national actor perceives the issue in question: Conduct exhaustive research on the issue to gain a better understanding of how the actors operate and why they make the decisions they do.
4. Specify all possible courses of action for each actor: List possible future courses of action available to the actors, even if they are seemingly unlikely.
5. Determine the major scenarios which you compare the alternate futures: Identify the major assumptions that could affect the actors' courses of action and determine the scenarios within which the problem could occur.
6. Calculate the total number of permutations of possible alternate futures for each scenario: Calculate the total number of alternate futures possible by using the formula $x^y = z$, where x is the number of courses of action available to each actor, y is the number of actors involved, and z is the total number of futures.

7. Perform a pairwise comparison of all alternate futures within the scenario to determine their relative probability: Compare every alternate future against each other and determine the most likely futures within each scenario, based on the assumptions and actors' perceptions.
8. Rank the alternate futures for each scenario from highest relative probability to the lowest based on the number of votes received: List the most- to least-likely alternate futures in each scenario, as determined by step 7.
9. Assuming each future occurs; analyze each alternate future in terms of its consequences for the issue in question: Assess the outcome of each alternate future with regard to the central problem, making sure to account for the variances in each future and how those differences will slightly alter the effect on the situation.
10. Determine the focal events that must occur in our present in order to bring about a given alternate future: Define the specific events that will have to take place in the present for the alternate futures to occur, and determine how the likely futures would be affected if those events happened.
11. Develop indicators for the focal events: Identify the list of occurrences that would indicate one of the focal events.
12. State the potential of a given alternate future to transpose into another alternate future: Take into account the free will of each actor by evaluating the likelihood of one alternate future to morph into another, and determine the actions it would take for that to happen.³

DATA ANALYSIS

“As clarified in the Research Design section of this study, careful analysis of the national actors, courses of action, scenarios, and an assessment regarding the alternate future is most likely to occur is required for any application of the LAMP”.³ This section will detail steps four through twelve of the analytical method, and will attempt to estimate which alternate futures are most likely and why. The possible COA for each actor, specifically China will be established before any analysis can be done. The major question of this research remains to be whether “China has the ability or intent to engage the United States in military warfare”, specifically if they are willing to carry out such actions in regards to Taiwan. The central question defines the primary actors of China, the United States and Taiwan and the variety of options available to each state as they approach a potential conflict.

VI. LAMP METHOD STEP 4: SPECIFY ALL POSSIBLE COURSES OF ACTION

For the purpose of this research; we are going to assume that any conflict between the U.S. and China will originate from an adverse reaction to the Taiwanese government. While there are a number of circumstances that could produce hostilities between the two countries, those issues range from currency manipulation, cyber attacks or espionage of some of the U.S. most sensitive secrets, none have brought the countries closer to the brink of war than any of the Taiwan Crisis. This study will focus on the most likely alternatives and scenarios, based off of that assumption. These two entities will be based heavily on historical data between the two countries, conflicts and current geo-political atmosphere. Going into this topic, there was an understanding that infinite scenarios and courses of action could be encountered, so we will center it on regional objectives and less on the media driven topics that are usually resolved with a call between the two heads of states.

For the sake of the research paper, Taiwan will play the primary role and their actions will influence the American and Chinese decisions as it pertains to diplomacy, a small scale conflict, or full-scale war. A number of studies contend that Taiwan is the major trigger point when discussing these two state actors. Beijing also views Taiwan as the most important issue in its bilateral relationship with Washington. The island is the ultimate prize in Beijing's quest for political control over greater China.¹³ This study will categorize the levels of intervention by Beijing or Washington into three categories: 1) Full-Scale Military Action (FMA); 2) Limited Military Action (LMA); 3) Diplomatic Action (DA). The definition to each term is listed below:

Diplomatic Action (DA)

Both Washington and Beijing would consider every diplomatic option known to man before rushing into a global conflict. President Obama and President Hu would engage this issue from a variety of angles, alliances and adversaries. Political wise, both congressional bodies would assemble on an emergency basis, and the U.N. body would be called upon to resolve the issue. These diplomatic measures have been utilized in the past and could certainly be used if certain thresholds are not reached between the two countries. Example: The EP 3 incident of 2001, that forced an U.S SRO aircraft to emergency land in China because of a mid-air collision with a PLA fighter. The 24 member American crew was released 11 days after the event, after intense negotiations and international condemnation of the Surveillance Missions. The matter was resolved when President Bush personally apologized for the death of the Chinese fighter pilot and the emergency landing.²⁰ This would be considered a diplomatic exchange by each country.

Limited Military Action (LMA)

After intense steps to settle things through diplomatic channels with no resolution, Washington and Beijing's next line of action would require some sort of military action. This could appear in form of forceful rhetoric tones, Order of Battle (OOB) movement, force posturing along different avenues of approaches, unscheduled joint exercises and the transfer of military equipment or supplies. Examples: During the Taiwan Strait Crisis, the U.S. provided Taiwan with military equipment as well as tactical assistance, whereas China has provided North Korea with information on the U.S./ROK force posturing during moments of heightened tensions. While both militaries were engaged and readying themselves for a conflict, diplomatic talks were still present, and the option to decrease operations is still available.

Full Military Action (FMA)

This phase is executed after diplomatic measures have failed, and the mere threat of war has not produced the desired effect needed to calm tensions. Washington and Beijing are both postured to take the first military strike on the other nation. Nuclear options are being discussed as well as first strike conventional options. This could also include a preemptive attack by the PLA on Taiwan. We must also keep in mind that full military action by one country does not mean the other will follow with a like response. Example: WW1, WW2 or the Vietnam War.

VII. LAMP METHOD STEP 5: THE MAJOR SCENARIOS**Hypothetical Scenario #1:****Taiwan declares its independence status to United Nations Security Council.**

Taiwan just declared its independence a unilateral nation. The DPP surprisingly attained a 75% backing for the legislature to become law. This process has been in the works since the

failed vote of 2004 when Taiwan's Democratic Progressive Party (DPP) failed to reach its goal of becoming an independent State.²¹ Washington and Beijing held extensive discussions leading up to the incident with Taipei, but the feisty assertions regarding the island's independence and daily media blitz of China-baiting yielded very little outcomes.

The U.S. is not pleased with Taiwan in any way and had grown restless with President Ma Ying-Jeou and his volatility toward the PRC government had begun to unsettle many in the West, as well as U.N. members. They also conveyed to him shortly after the announcement that it would be nearly impossible to get an adequate amount of forces to the region in support of the island, due to budget constraints, logistical chokepoints and obligations in Afghanistan. Carriers and bombers have started the journey to the region in hopes of making it there before an attack takes place. China had emphatically stated that they will retake the island if the vote is passed and have already implemented a shock and awe campaign on airfields, command, control facilities and military equipment. The PRC are quoted as saying "this is a internal affair and any country who intervenes does so at the risk of their mainland being attacked as well as military forces in the engagement".

Hypothetical Scenario #2:

Taiwan abruptly breaks away from the 'One China' principle and ends all dialogue with Beijing

Economic and cultural exchanges between Taiwan and China have been severed, as well as lines of communication between the citizens of the two nations. President Ma Ying-jeoui has just announced that Taiwan is no longer under the rule of the PRC and will now hold dialogues with any nation unilaterally and independent of any agreement that was created under the old

“One China” Policy. In his press conference, he went on to describe the cross-strait relations as “state to state relations, or at least special state to state relations” and stated his party prepared to promote a separatist policy with a “two Chinas” Policy. This action has seriously damaged the basis for peaceful reunification of the two sides, harmed the fundamental interests of the entire Chinese nation including the Taiwan compatriots, and jeopardized peace and stability in the Asia-Pacific region.²²

Washington has called for an emergency meeting with the U.N.S.C as well as allies in the Pacific to calm the situation. The U.S. embassies in both counties are being evacuated as a precaution. Washington also states that this incident should not be mistaken as a U.S. led provocation against China. The U.S. had nothing to do with this decision, and in many ways told Taiwan that the transfer of military equipment and information would be restricted if the bill does pass. Washington and other U.N. countries have committed forces to conduct evacuations. China has implemented an A2D2 maneuver in the Strait and has implied that the Strait of Malacca would possibly be denied to foreign vessels as well. India, Russia and other nations who utilize the Strait have called for a quick resolution to the matter.

Hypothetical Scenario #3:

Taiwan receives a Missile Defense System from the United States

Although the Obama Administration was hesitant on the potential arms sale to Taiwan, they have come to the realization that Taiwan’s aging Missile Defense System (MDS) is outdated and would not give the U.S. sufficient time to employ a counter to the PLA on slaughter of ballistic missiles. U.S. Foreign Military Sales (FMS) to Taiwan for a missile-defense system had been

approved by Congress two years ago, the Letters of Offer and Acceptance (LOAs) generated, and the missile defense system has just arrived at the Port of Kaohsiung.

China is furious but has stated that the MDS is penetrable but an action as monumental as this one will come at extreme consequences. They will go forth with a MD test to illustrate the new system's numerous vulnerabilities. The U.S. has stated that the action was in the works for a number of years now, dating back to the Clinton Administration but the different political environments, budget constraints and other obligations had impeded the process.

VIII. LAMP METHOD STEP 6: TOTAL NUMBER OF PERMUTATIONS OF ALTERNATE FUTURES IN EACH SCENARIO

The courses of action and scenarios have been identified; the alternate futures must now be calculated with a predetermined formula set forth by the LAMP method. In this scenario, there are two primary actors (China and U.S.) with Taiwan set as the actual trigger state (any action against Taiwan, is considered an action against the U.S.) and three courses of action available to each. Based on the formula (listed below) described in the Research Design section, nine possible alternate futures apply in this study, and they are consistent across all three scenarios. Table 1 below depicts the possible alternate futures, numbered 1-9 in the first column, followed by the available courses of action for the United States and China in the following 2 columns. An example of the table being utilized and steps of the process are listed below:

$$X^Y = Z$$

X = Number of courses of action open to each actor (**3**)

^Y = Number of actors (**2** – Taiwan is the trigger point and accounted for by the scenarios)

Z = Total number of alternate futures (**9**)

Scenario #1 ($3^2 = 9$) AND Scenario #2 ($3^2 = 9$) Scenario #3 ($3^2 = 9$)

Table 1: Alternate Futures

Alternate Future	CHINA	U.S
1	FMA	FMA
2	FMA	LMA
3	FMA	DA
4	LMA	FMA
5	LMA	LMA
6	LMA	DA
7	DA	FMA
8	DA	LMA
9	DA	DA
FMA = Full Military forces are committed		
LMA = Limited Military forces are committed		
DA = Diplomatic and military actions will be attempted through U.N, Direct and Indirect Dialogue		

IX. LAMP METHOD STEP 7: PAIRWISE COMPARISONS OF ALTERNATE FUTURES

Now that the alternate futures have been defined, the study will move on to what is pegged as step 7 of the LAMP method (pairwise comparison). In this step, comparison analyzes the alternate futures two at a time, always assuming that the two futures being compared at the moment are the only ones that exist.² For example, Alternate Future 1 (China Utilizes FMA vs U.S FMA) will be compared against all other alternate futures until the top two are selected, as well as the most unlikely. Analysis will then be conducted to explain if these options are valid and justified.

X = Total number of pairwise comparisons
 N = Total number of alternate futures to be analyzed

$$X = (n-1) + (n-2) \dots + (n-n)$$

n = 9 alternate futures to be analyzed

$X = (9-1) + (9-2) \dots + (9-9) = 36$ pairwise comparisons to be performed

X. LAMP METHOD STEP 8. RANK THE “ALTERNATE FUTURES” FOR EACH SCENARIO FROM THE HIGHEST RELATIVE PROBABILITY TO THE LOWEST

Results of Hypothetical Scenario #1:

Taiwan declares its independence status to the United Nations Security Counsel.

Future	US	Russia	Votes	Rank
1	FMA	FMA	6	3
*2	FMA	LMA	8	1
*3	FMA	DA	7	2
4	LMA	FMA	3	6
5	LMA	LMA	4	5
6	LMA	DA	5	4
**7	DA	FMA	0	9
8	DA	LMA	1	8
9	DA	DA	2	7
FMA = Full Military forces are committed				
LMA = Limited Military forces are committed				
DA = Diplomatic and military actions will be attempted through U.N, Direct and Indirect Dialogue				

Alternate future 2:

China makes good on their threat to retake island after Taiwan announced they are an independent state, while the U.S. employs some limited support to the region.

Alternate future 2 received the most votes (8); therefore, it has the highest relative probability. The PRC is willing to commit their full military services to retaking the island. This

scenario is certainly not a far cry, as they have stated in the past that “the island would never be considered a separate state and such action would be considered “an act of war”. The PLA has modernized its doctrine, OOB, and C² to carry out that specific operation. On the other side, the U.S. will commit limited military forces to the conflict for a number of reasons.

The U.S. limited role is mainly dictated by the realization that a conflict in the Strait is not winnable; China’s A2D2 efforts would push out the military’s most vital component in a strait conflict, the USN. The PLA’s capability to engage ships and carriers with ballistic missiles makes a true naval presence nearly impossible. Time would also be a major factor in that decision; the PLA is expected to fire hundreds of ballistic missiles at the island within the first couple of hours, and the U.S. would need days or potentially weeks to make it to the fight. Last but not least, the U.S. public is not willing to see tens of thousands military members die for another country, and Afghanistan errors and casualties would be too much pressure for any president to commit troops in the name of liberating another country.

Alternate future 3:

China fully commits to reclaiming the island, while the U.S. puts diplomatic pressure on both sides to end the conflict.

Alternate future 3 received the second most votes; therefore, it has the second highest relative probability. The U.S. does not want to see any change to the “One China” policy; as a result they would use every diplomatic measure at hand, but would likely stay out of the actual military aspect of things. This solution would allow China to gain the upper hand in the eye of the international community, and it would also exhibit an action similar to what the U.S. took in

the 2008 Georgia/Russia conflict. The U.S. was involved as a third party, but was never willing to commit U.S. forces in the defense of the Georgian government.

Alternate future 7:

The U.S fully commits to the defense of Taiwan, while China puts diplomatic pressure on the international community to install Taiwan under a “One Policy” rule

Alternate Future 7 didn’t garner any votes at all; there is no way the U.S. would commit fully to the conflict while the Chinese government waits on the U.N. or some other organizational body to dictate the outcome of an internal affair. China will always be committed to unification, whether that unification comes peacefully or through conflict. This course of action has no validity at all.

Results of Hypothetical Scenario #2:

Taiwan abruptly breaks away from the “One China” principle and ends all dialogue with Beijing.

Future	US	Russia	Votes	Rank
1	FMA	FMA	4	4
*2	FMA	LMA	7	2
3	FMA	DA	5	3
4	LMA	FMA	1	6
5	LMA	LMA	5	3
*6	LMA	DA	8	1
**7	DA	FMA	0	7
8	DA	LMA	2	5
9	DA	DA	4	4
FMA = Full Military forces are committed				

LMA = Limited Military forces are committed
DA = Diplomatic and military actions will be attempted through U.N, Direct and Indirect Dialogue

Alternate future 6:

China commits limited forces to the strait as a means to persuade the Taiwanese government the “One China” policy must be upheld, while the U.S. puts diplomatic pressure on Taiwan to reconsider.

Alternate future 6 received the most votes (8) in this particular scenario; therefore it has the highest relative probability. While the PRC would certainly be furious over the statement, or action, it is possible they would commit only limited forces to persuade the Taiwanese government from going any further. Former ROC President Chen has made similar comments in the past that resulted in heightened tensions but never in war.

Alternate future 2:

China makes good on their threat to retake island after Taiwan shockingly announced they are an independent state, while the U.S. employs some limited support to the region.

Alternate future 2 received the second most votes; therefore, it has the second highest relative probability. The PRC is willing to commit full military forces to retaking the island, even if they have not fully committed to an independent statehood. The U.S. and allies would most likely provide aid but not in the form of combat assistance.

Alternate future 7:

The U.S fully commits to the defense of Taiwan, while China puts diplomatic pressure on the international community to install Taiwan under a “One Policy” rule

Alternate future 7 didn't garner any votes and has very little probability of occurring.

There is no way the U.S. would be the aggressor in this situation.

Results of Hypothetical Scenario #3:

Taiwan receives a Missile Defense System from the United States

Future	US	Russia	Votes	Rank
**1	FMA	FMA	0	9
2	FMA	LMA	2	7
3	FMA	DA	5	4
4	LMA	FMA	3	6
5	LMA	LMA	6	3
*6	LMA	DA	7	2
7	DA	FMA	1	8
8	DA	LMA	4	5
*9	DA	DA	8	1
FMA = Full Military forces are committed				
LMA = Limited Military forces are committed				
DA = Diplomatic and military actions will be attempted through U.N, Direct and Indirect Dialogue				

Alternate future 9:

The U.S and China both commit to resolving the issue through diplomatic measures.

Alternate future 9 received the most votes (8) in this particular scenario; therefore, it has the highest relative probability. China and the U.S. have both sold arms to countries that would be considered less desirable in the eyes of the other nation. The U.S. is embedded with Taiwan, India and other Pacific actors, while China has relationships with a number of nations that the U.S. would

consider to the “rogue nations”. The U.S. would not sell the missile defense system until there was 100% assurance that it would not produce a war with the PRC.

Alternate future 6:

China commits limited forces to the strait as a means to persuade the Taiwanese government the policy must be upheld, while the U.S puts diplomatic pressure on Taiwan to reconsider.

Alternate future 6 received the second most votes; therefore, it has the second highest relative probability. While the PRC would certainly be furious over Taiwan acquisition, it would not be an action that annotates war. The system would be a minute obstacle to overcome in an initial assault on the island. In a major shooting war, Chinese manned air strikes would likely be preceded by an initial wave of SRBM/LACM attacks focusing on Taiwan’s air bases, command and control nodes, radar stations, and SAM sites, so as to reduce - or at least temporarily paralyze a response .⁹

The U.S. is likely to work out any deal ahead of time, just to make sure the measure doesn’t overstep the fictional threshold set out by the PRC. Both countries will play it out in the media, but at the end of the day, this would not alter either country on a course of action in the strait.

Alternate future 9:

China and the U.S. are engaged in a full-out conflict over the sale of the Missile Defense System.

Alternate future 9 didn’t garner any votes and has very little probability of occurring. Deals would be made, and compromise on a number of issues would be discussed before the final sale of such a high tech system would be finalized. There is no way the U.S. would commit to this venture without knowing the second and third order effects of the deal.

XI. LAMP METHOD STEP 9- STEP 11.**(STEP 9)ANALYZE EACH ALTERNATE FUTURE INTERMS OF ITS
CONSEQUENCES, (STEP 10) DETERMINE FOCAL EVENTS THAT MUST OCCUR
AND (STEP 11) DEVELOP INDICATORS FOR THE EVENTS**

Steps 9-11 of the lamp method involve deep analysis from the researcher's point of view. The analyst must take all facts throughout the research and determine how different courses of action are preceded by focal events as well as their indications and warnings. This area of the publication will discuss the possible effects of each selected alternate future, as well as consequences that will result from those actions. Step 10 of the research involves a detailed list of focal events associated with each alternate future. A "focal event" is an occurrence of sufficient magnitude that it changes the relative probability of alternate futures. If we were to "draw a line" in time from our present into the future, a focal event would resemble an intersection with two or more branches into other futures.²

Step 11 of the LAMP method yields the indicators associated with the phenomena. For each focal event associated with an alternate future, it should be possible to develop a list of indicators that such an event either has occurred or is about to occur.² Most of the events and indicators are highly unlikely but possible; therefore, they should be accounted for. Some indicators or events may be feasible enough to re-evaluate the voting process that took place in step 7.

Results of Hypothetical Scenario #1:

Taiwan declares its independence status to the United Nations Security Council.

Alternate future 2:

China makes good on their threat to retake island after Taiwan shockingly announced they are an independent state, while the U.S. employs some limited support to the region.

If Taiwan does seek independence, the island would be slammed severely by the PLA, a sentiment that has been emphasized on a number of occasions throughout the international community. China has stationed some five hundred ballistic missiles across the Taiwan Strait from the island and is deploying additional missiles each year. "These missiles have no plausible purpose other than to coerce Taipei into opening talks on reunification with the mainland—or, failing that, to batter the island into submission".¹⁸ This would signal the end of the U.S reign as the major superpower and leave them with very limited options.

Not one of those options involves holding on to the military superiority that has been enjoyed for the last 30 years. If the U.S. doesn't come to the defense of Taiwan, they will essentially lose the confidence of allies and adversaries alike. If they employ limited defense, the People's Liberation Army Navy will follow a progressive defense path by trying to first secure the waters within the "first island chain" -- the stretch of islands running parallel to China's coast, including Japan's Ryukyu Islands, Taiwan and the northern Philippines -- and then proceed to the "second island chain" -- bordered by Guam, northern Australia and Indonesia.²⁵

This will be carried out through a number of maritime operations that include but are not limited to anti access procedures, blockades, and anti ship attacks (See Figure 8 below). The third option involves full military action that may cripple the U.S. Military, government, and economic system. The American citizens are unlikely to support a full military deployment to the Pacific as well. As discussed earlier in the alternate futures, America could not handle thousands

of deaths based off another's country's external affairs, the sight of advanced bombers and jets being shot down, and the risk of Ballistic missiles hitting the United States mainland. The consequences for Taiwan would mean reunification by force, but those consequences could be so much worse for the U.S. and its position at the top of the world's landscape.

Figure 8: First and Second Island Chain COA



Sources: Data adapted from Office of the Secretary of Defense. 2011. Chinese Military Capabilities

Focal Events that could alter the relative probability

1. The U.S. engages the Chinese and Taiwanese government on the endless possibilities that are presented to both countries with a reunification agreement

Key Indicators

U.S. holds diplomatic talks with both heads of state, congressional body and military advisors

U.S., China and Taiwan carry out joint naval exercises

China exports weapons and military technology to the Taiwanese military

Focal Events that could alter the relative probability

2. China extends an olive branch to the Taiwanese government and agrees to adopt a semi-democratic form of government

Key Indicators

China advances procedures to improve their human rights policies

China abandons most support for communist organizations within the country

China government looks to reform its leadership and policies

Focal Events that could alter the relative probability

3. Chinese government refers to Taiwan as an Independent State

Key Indicators

The media goes into frenzy over the statement

Taiwan acknowledges the “one policy” rule is no longer justified and severs ties with U.S.

Results of Hypothetical Scenario #2:

Taiwan abruptly breaks away from the “One China” principle and ends all dialogue with Beijing

Alternate future 6:

China commits limited forces to the strait as a means to persuade the Taiwanese government the policy must be upheld, while the U.S. puts diplomatic pressure on Taiwan to reconsider.

The consequences for Taiwan would be monumental as it pertains to their economy; China is the # 1 exporter and # 2 importers to the island. China would employ a limited blockade to the straits that would impede any surveillance, reconnaissance, operations by the U.S. or allied forces in the region. Essentially, Taiwan would be ostracized from the international community, as no country would be willing to get involved, and risk military action by the PLA. The U.S. diplomatic efforts would fall on deaf ears and the promise of defending Taiwan, let alone defending democracy would not go unnoticed by allies like Israel, Japan and Australia.

Focal Events that could alter the relative probability

1. The U.S. loses political influence over Taiwan

Key Indicators

The U.S and Taiwan ties are strained over a number of political gaffes by both countries

Taiwan forgoes the reliance on military supplies from the U.S.

Taiwan will turn a blind eye to companies smuggling nuclear parts to Iran.

Focal Events that could alter the relative probability

2. China increases its cooperative efforts with the Taiwanese government

Key Indicators

China abandons its claims on several disputed territories

Chinese government looks to reform its leadership and policies

China negotiates with Taiwan as a mutual partner, instead of partner of distinct advantage

Results of Hypothetical Scenario #3:

Taiwan receives a Missile Defense System from the United States

Alternate future 9:**The U.S and China both commit to resolving the issue through diplomatic measures.**

The consequences in this scenario could involve a pre-emptive strike by the PLA before the new missile defense system is installed. The acquisition of this missile defense system would accompany rhetoric from the PRC and ROC alike. Tensions will rise; the PLAN will conduct unscheduled maritime exercises as well as missile tests similar to what we witnessed in the 1995 Strait crisis. The PRC will vote against any sanctions involving the national interest of the U.S., including sanctions on Iran, North Korea and other rogue nations. These votes will not be based on principle but irritation toward further U.S. intervention.

Alliances will be formed in the court of public opinion; countries will be pressured to support the East or the West on the matter. Russia will most likely side with China and, in return, let the U.S. know that they should not be so vocal on arms sales to Syria. China could possibly help North Korea upgrade their aging Integrated Air Defense System (IADS).

Focal Events that could alter the relative probability

1. China stops producing military equipment geared toward attacking Taiwan

Key Indicators

PLAN maritime exercise decrease in the Strait

The number of Ballistic missiles in the Strait decreases

China increases cross Strait dialogue

Focal Events that could alter the relative probability

2. China abandons the proposed A2D2 maneuver

Key Indicators

Less research and development is concentrated on the PLAN

China stops the pursuit of building any further aircraft carriers

The U.S. decreases its naval presence in the region

XII. CONCLUSION

The lingering questions remains, “Does China have the intent, capability or motive to become the predominant military superpower in the world”, and if they are, will Taiwan be used as a chess piece to advance that cause? A conflict that results in a victory over the U.S. on a small scale in the Pacific could generate enough accolades that the PRC abandons the vision of regional power and go directly to worldwide dominance. A showdown with the U.S. allows a couple things; an excuse to demonstrate their advance technological gains, leveraging ability in midst of war and the ultimate alliance support.

Some may argue that there are numerous underlying situations that could potentially lead to a U.S.-China conflict, so why Taiwan as the trigger point? What I have learned over the past decade is that territorial disputes are rarely won by the small country; the kid that carries the big stick has the distinct advantage, and he knows it. A lot of this is based on a phenomena referred to in psychology circles as Image Theory. Image Theory is a political psychological approach that draws connections between policymakers’ image of other countries and their resulting behavior.¹⁰ Images contain information about a country’s capabilities, culture, intentions, kinds of decision-making groups, and perceptions of threat or opportunity.

Capabilities include economic characteristics, military strength, and domestic political stability and effective policy making and implementation.¹⁰ For example, when decision makers hold the so-called colonial or client image of another country, they consider that country and its people to be inferior in terms of culture and capabilities. They also assume that the people are incompetent and childlike and are ruled by small elite, who are generally not a threat and who are often corrupt. This image produces behavioral tendencies that are coercive and non-compromising (you do not negotiate with children; you tell them what to do).¹⁰ Regardless of the problem, if you hold a superior stance and are not required to bend on your perspective, it is more than likely you won't.

China has a case of this Image Theory as it pertains to Taiwan, and what irks them more than anything is losing that advantage or influences. To compound matters, this loss could come at the hand of the world's superpower that obviously looks down at every nation, and feels that their beliefs, motives and desires are superior to those of all other countries. China has the capability of defeating the U.S. in any size conflict. Their objective is to be the world's dominating superpower, and the implications could mean the U.S. and Taiwan could be the catapult for this aspiration.

****See appendixes for more supporting details on China's rise to power****

ENDNOTES

- ¹ U. S. Government. 2009. A Tradecraft Primer: Structured Analytic Techniques for improving Intelligence analysis.
- ² Jonathan Samuel Lockwood and Kathleen O'Brien Lockwood, *The Lockwood Analytical Method for Prediction (LAMP)* (Columbia, MO: MBS, 1993), 29
- ³ Lockwood, Jonathan S. "The Application of LAMP." LAMP. 2010. <http://lamp-method.org/2.html> (accessed May 31, 2012).
- ⁴ Office of the Secretary of Defense. 2011. Military and Security Developments: Involving the People's Republic of China
- ⁵ Shambaugh, David. *Modernizing China's Military*. 2003. George Washington University
- ⁶ Scobell, Andrew. *Show of Force: The PLA and the 1995–1996 Taiwan Strait Crisis*. 1999. University of Louisville and research associate of the East Asian Studies Center at Indiana University
- ⁷ Statement of Admiral Robert F Willard. 2012. U.S. Pacific Command Posture. Senate Armed Services Committee
- ⁸ Chong, William. 2011. Engagement in Asia vital to America's balancing act. *The Straits Times/ Asia News Network*
- ⁹ Murphy, Lotta Danielsson. 2010. The Balance of Air Power in the Taiwan Strait. *US-Taiwan Business Council*.
- ¹⁰ Cottam, M.L, Mastors, E., Preston, T. & Dietz-Uhler, B. (2010). *Introduction to Political Psychology*. New York: Psychology Press.
- ¹¹ Kaplan, Robert D. 2012. *China Is No Longer Predictable*. Stratfor Global Intelligence
- ¹² Hickey, Dennis. 1994. *United States-Taiwan Security Ties: from Cold War to beyond containment*, Praeger Publishers
- ¹³ Andrew Scobell, David Lai and Kamphausen. 2011. *Chinese Lessons From Other's People's War*. Strategic Studies Institute Book
- ¹⁴ The SEcDev Group. 2009. *Tracking GhostNet: Investigating a Cyber Espionage Network* : MunkCentre For International Studies
- ¹⁵ Ng, Teddy. 2011. Hi-tech weapons require revolution in thinking, analysts say. *South China Morning Post*, p 04.
- ¹⁶ Chowder, Doug. 2012. *Storm Warning*. United States Naval Institute. *Proceedings* 138. 4: 18-23.

- ¹⁷ McCollough, Amy. 2012. Breaking Down AirSea Battle. The Daily Report eNewsletter
- ¹⁸ Holmes, James R., and Toshi Yoshihara. 2005. "TAIWAN." Naval War College Review 58, no. 3: 43-61. Academic Search Premier, EBSCOhost (accessed July 7, 2012)
- ¹⁹ Bryan Krekel, Patton Adams, and George Bakos. 2011. Occupying the Information High Ground: Chinese Capabilities for computer network Operations and Cyber Espionage. U.S-China Economic and Security Review Commission.
- ²⁰ Thomas E. Ricks and Don Phillips. 2001. Disassembled Navy Plane Scheduled to Leave China Today. The Washington Post: Final Edition.
- ²¹ "Not so fast, Mr Chen." Economist 373, no. 8406 (December 18, 2004): 52-53. Academic Search Premier, EBSCOhost (accessed June 30, 2012).
- ²² "The One China Principle and the Taiwan Issue." Chinese Journal Of International Law 2, no. 2 (July 2003): 732-746. Academic Search Premier, EBSCOhost (accessed June 30, 2012).
- ²³ Office of the Secretary of Defense. 2007. Annual Report To Congress: The Military Power of the People's Republic of China: 2007: A Report to Congress Pursuant to the National Defense Authorization Act Fiscal Year 2000.
- ²⁴ Ross, Ed. 2011. "Taiwan's Ballistic-Missile Deterrence and Defense Capabilities." China Brief 11, no. 3: 9-13. International Security & Counter Terrorism Reference Center, EBSCOhost (accessed June 30, 2012).
- ²⁵ CHANG, ANDREI. 2009. "Analysis: China's global navy -- Part 2." UPI Security Industry International Security & Counter Terrorism Reference Center, EBSCOhost (accessed July 7, 2012).

Appendix A: Military-to-Military Exchanges

Chinese participation in bilateral and multilateral military exercises since 2006

Year	Exercise Name	Type of Exercise	Participants
2011	Khan Quest	Peacekeeping	Mongolia, Vietnam, U.S., Japan, South Korea
	Brisk Eagle	Counter-terrorism	Belarus
	Sharp Blade	Special Forces	Indonesia
	Unnamed	Counter-piracy	Pakistan
	Unnamed	Counter-terrorism	Tanzania
	Unnamed	UN Military Observer	Hosted by China, United Nations (14 countries participated)
	Peace 11	Counter-terrorism	Pakistan, Italy, France, Indonesia, and Malaysia
	Shaheen-1	Air	Pakistan
	Cooperation Spirit	HA/DR	Australia
	ASEAN Regional Forum	HA/DR	ASEAN
	Youyi-IV	Counter-terrorism	Pakistan
2010	Blue Strike/Blue Assault 2010	Counter-terrorism	Thailand
	Cooperation 2010	Counter-terrorism	Singapore
	Friendship 2010	Counter-terrorism	Pakistan
	Friendship Action 2010	Ground (Mountain Warfare)	Romania
	Peace Angel 2010	Medical	Peru
	Peace Mission 2010	Counter-terrorism	Russia, Kazakhstan, Kyrgyzstan, Tajikistan
	Strike 2010	Counter-terrorism	Thailand
	Unnamed	Search and Rescue	Australia
	Unnamed	Maritime	New Zealand
	Unnamed	Counter-piracy	South Korea
	Unnamed	Search and Rescue	Taiwan
	Unnamed	Air	Turkey
	Unnamed	Ground	Turkey
	Unnamed	Search and Rescue	Vietnam

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments: Involving the People's Republic of China

Appendix A: Continued

2009	Aman (Peace) 2009	Maritime	Hosted by Pakistan (38 countries participated)
	Cooperation 2009	Counter-terrorism	Singapore
	Country-Gate Sharp Sword 2009	Counter-terrorism	Russia
	Peace Angel 2009	Medical	Gabon
	Peacekeeping Mission 2009	Peacekeeping Operations	Mongolia
	Peace Mission 2009	Counter-terrorism	Russia
	Peace Shield 2009	Counter-piracy	Russia
	Unnamed	Maritime	Singapore
2008	Hand-in-Hand 2008	Counter-terrorism	India
	Strike 2008	Counter-terrorism	Thailand
2007	Aman (Peace) 2007	Search and Rescue	Pakistan
	China-France Friendship 2007	Maritime	France
	China-Spain Friendship 2007	Maritime	Spain
	Cooperation 2007	Counter-terrorism	Russia
	Hand-in-Hand 2007	Counter-terrorism	India
	Peace Mission 2007	Counter-terrorism	Russia, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan
	Strike 2007	Counter-terrorism	Thailand
	Western Pacific Naval Symposium	Search and Rescue	United States, France, Japan, Australia, New Zealand, India, Pakistan, ROK, Singapore
	Unnamed	Maritime	India
	Unnamed	Search and Rescue	Australia, New Zealand
2006	Cooperation 2006	Counter-terrorism	Tajikistan
	Friendship 2006	Counter-terrorism	Pakistan
	Unnamed	Search and Rescue	United States

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments: Involving the People's Republic of China

Appendix B: China Outreach Plan

Chinese significant visits to U.S Allies and Adversaries

Countries Visited by Senior Chinese Military Leaders, 2006-2011					
2011	2010	2009	2008	2007	2006
Australia	Angola	Australia	Bahrain	Argentina	Australia
Bolivia	Australia	Bulgaria	Belarus	Chile	Belarus
Bulgaria	Brazil	Burma	Brazil	Cuba	Burma
Chile	Colombia	Finland	Brunei	Greece	Cambodia
Colombia	Congo-Kinshasa	Germany	Chile	Japan	Denmark
Croatia	Egypt	Japan	Germany	Kuwait	France
Cuba	Germany	New Zealand	Hungary	Kyrgyzstan	Hungary
France	Indonesia	North Korea	India	Mongolia	India
Germany	Kazakhstan	Pakistan	Indonesia	Philippines	Laos
Ghana	Kenya	Papua New Guinea	Italy	Russia	Malaysia
Indonesia	Macedonia	Russia	Japan	South Korea	New Zealand
Israel	Mexico	Serbia-Montenegro	Nepal	Thailand	North Korea
Italy	Mongolia	Singapore	Norway	United States	Norway
Japan	Namibia	Slovakia	Oman	Uzbekistan	Pakistan
Kazakhstan	New Zealand	South Korea	Qatar	Vietnam	Romania
Lebanon	North Korea	Thailand	Saudi Arabia		Russia
Nepal	Pakistan	Turkey	Serbia-Montenegro		Singapore
New Zealand	Romania	United States	Singapore		South Korea
Pakistan	Russia	Vietnam	South Korea		Tajikistan
Peru	Serbia		Tajikistan		Thailand
Philippines	Singapore		Thailand		United States
Russia	Tanzania		United Arab Emirates		Vietnam
Serbia	Turkmenistan		Venezuela		
Seychelles	United Kingdom				
Singapore	Vietnam				
Sweden					
Turkey					
Uganda					
Ukraine					
United Kingdom					
United States					
Uruguay					
Uzbekistan					
Vietnam					
Zimbabwe					

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments: Involving the People's Republic of China

Appendix B: China Outreach Plan

Senior Foreign Military Officials Visiting China in 2011			
Algeria	Greece	Peru	Thailand
Bangladesh	Indonesia	Romania	United Kingdom
Belarus	Israel	Russia	United States
Burma	Italy	Serbia	Vietnam
Cambodia	Kazakhstan	Slovenia	Zambia
Cameroon	Laos	South Korea	
Djibouti	Montenegro	Switzerland	
European Union*	New Zealand	Tajikistan	
Gabon	Pakistan	Tanzania	

This list includes visits by senior defense officials and chiefs of the armed services. It excludes visits associated with multilateral military exercises.

*The EU's High Representative for Foreign Affairs and Security Policy, Catherine Ashton, in October 2011 met in Beijing with Chinese Defense Minister Liang Guangle.

Sources: Data adapted from Office of the Secretary of Defense. 2012. Military and Security Developments: Involving the People's Republic of China