POSSIBLE U.S. NAVY RESPONSES TO PEOPLE'S REPUBLIC OF CHINA MILITARY ACTION AGAINST TAIWAN

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
Fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
Strategy

by

LACY H. BARTEE, JR., LCDR, SC, USN
B.S., United States Naval Academy, Annapolis, MD, 1983

Fort Leavenworth, Kansas
2000

Approved for public release; distribution is unlimited.

DTIC QUALITY INSPECTED 4

20000921 099

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: LCDR Lacy H. Bartee, Jr.

Thesis Title: Possible U.S. Navy Responses to People's Republic of China Military Action Against Taiwan

Approved by:

_____, Thesis Committee Chairman
LTC Richard E. Coon, M.A.

_____, Member
Joseph G. D. Babb, M.P.A., M.A.

_____, Member
Gary J. Bjorge, Ph.D.

Accepted this 2d day of June 2000 by:

_____, Director, Graduate Degree Programs
Philip J. Brookes, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE ROLE OF THE US NAVY IN DEFENDING TAIWAN FROM CHINA by LCDR Lacy H. Bartee, Jr., SC, USN, 85 pages.

This thesis investigates the role the US Navy would have in the defense of Taiwan against the Peoples Republic of China. It also examines the capabilities of the People's Liberation Army, Air Force, and Navy.

This study portrays a People's Republic of China strategy to use its military to force the reunification of Taiwan with the Mainland. This strategy does not allow for U.S. interference. The People's Liberation Army is pursuing the research and manufacturing of advanced missiles, which can go farther with greater accuracy to attempt to threaten US carrier battle groups sent to defend Taiwan.

Several factors currently limit the Chinese in forcing Taiwan to reunify: the limited power projection capabilities over water of its Air Force and Navy; the limits prescribed by the maintenance, logistics, and training infrastructures of all three Chinese military services; the credible military of Taiwan; and the US Navy.

The People's Republic of China, if it continues on its course to build large quantities of advanced weapons, such as long-range cruise missiles or conventional warhead ballistic missiles, might control the sea-lanes approaching Taiwan for hundreds of miles. Until then, Taiwan should be safe from a Chinese conventional attack.

TABLE OF CONTENTS

Page

APPROVAL PAGE ii

ABSTRACT iii

LIST OF ILLUSTRATION AND TABLES .....

CHAPTER

1. INTRODUCTION 1
   - Introduction 1
   - Methodology 5
   - Fact, Assertions, Assumptions 6
   - Literature Review 9

2. HISTORICAL FRAMEWORK FROM 1949 TO 1994 15
   - United States and People's Republic of China Relations 15
   - Democratization of Taiwan: To Scare Beijing 24

3. THE TAIWAN STRAIT CRISES OF 1995-1996 AND 1999-2000 ..... .29
   - Historical Background Information ..... .29
   - Comparison of People's Republic of China and Taiwan Militaries 33

4. THE PEOPLE'S REPUBLIC OF CHINA MILITARY: WEAKNESSES, STRENGHTHS, AND FUTURE OPTIONS 38

5. POSSIBLE PEOPLE'S REPUBLIC OF CHINA MILITARY COURSES OF ACTION WITH UNITED STATES NAVY RESPONSES 56
   - People's Republic of China Course of Action I: Naval Conflict Only 58
   - United States Navy Response to Course of Action I 60
   - Conclusion to Course of Action I 61
   - People's Republic of China Course of Action II: Missile Attack Only 62
   - United States Navy Response to Course of Action II 64
   - Conclusion to Course of Action II 66
   - People's Republic of China Course of Action III: Missile and Air Attack .. 67
   - United States Navy Response to Course of Action III 69
   - Conclusion to Course of Action III 71
   - People's Republic of China Course of Action IV: Missile, Air, and Amphibious Attack 72
   - United States Navy Response to Course of Action IV 76
   - Conclusion to Course of Action IV 78

Conclusion 79

REFERENCE LIST 86

INITIAL DISTRIBUTION LIST 90

LIST OF ILLUSTRATION

Figure Page

1. Taiwan Map 18

LIST OF TABLES

Table

1. Personnel 34

2. Air Force Fighters and Attack Aircraft 34

3. Aor Fprce Tramsports 35

4. Navy 35

5. Plan Amphibious Lift Capability 35

6. PRC and ROC Military Hardware Additions Through 2004 54

7. PRC Courses of Action/Changes to US Navy Response 57

CHAPTER 1

INTRODUCTION

In 1949 Chiang Kai-shek's government that had ruled China since 1928 fled to the island province of Taiwan as Mao Zedong's Communist forces conquered the Chinese mainland. On 1 October, Mao declared the establishment of the People's Republic of China (PRC). Chiang Kai-shek's government, the Republic of China (ROC), hoped to use Taiwan as a base to recapture Mainland China. Mao sought to conquer Taiwan and achieve national unity. Today, this situation has partly changed. The government in Taiwan no longer considers the possibility of invading the Mainland and replacing the Communist form of government with a Taiwanese brand of democracy. However, the PRC goal of reunification has not changed. The PRC considers Taiwan a renegade province that must come under its authority. From 1949 to the present, the PRC has consistently indicated that it intends to gain control of Taiwan, using force if necessary.

This unification might have happened in 1950, but in June of that year the United States (US) 7th Fleet was sent into the Taiwan Strait after the North Korean invasion of South Korea in order to keep the PRC from moving against Taiwan. Since then, parts of the US 7th Fleet have moved into the Taiwan Strait periodically in times of crisis between the PRC and Taiwan. From 1995 to the present, the PRC has exercised its military near Taiwan in attempts to influence democratic elections. This research thesis

asks the question: How would the US Navy help defend Taiwan against the PRC if the PRC did attack to forcibly reunify Taiwan with the Mainland?

The research leads to additional questions. What types of conflict could ensue? What military forces does the PRC have at its disposal for military operations against Taiwan? What are the PRC's options, based on its military's capabilities? What are its strengths and weaknesses? Could the ROC hold the PRC off without military aid from the US? What are the ROC's military strengths? How would the US Navy assist the ROC in the defense of Taiwan? What strengths does the US Navy bring to the defense of Taiwan?

President Clinton sent two US carrier battle groups to the Taiwan Strait during the crisis between the PRC and Taiwan in 1995-996, but not in 1999-2000. The PRC did not attack Taiwan during the 1995-1996 or 1999-2000 crises. It could have been because of the presence or threat of presence of US carriers. Was it because the PRC knew it was not ready to attack either or both Taiwan and the US? Were the exercises just exercises, or were they part of a long-term strategy of keeping pressure on Taiwan? Was the PRC testing the waters to see what the US Navy would do? How vulnerable are the US carriers to the current and future PRC weapons inventory? If the PLAN used mines to attempt to close Taiwan ports, what type of impact would the mines have on the US and ROC Navies? Could the PRC forces keep the US Navy from helping the ROC? Would the Peoples Liberation Army Navy (PLAN) fight the US Navy or would it stay close to the Mainland, under an antiair missile umbrella? If the US did agree to help Taiwan repel a PRC attack, what would that US force look like? Important as those questions are, it is

just as important to understand what has led the PRC and ROC to face-off in this manner since 1995.

Earlier in this century, China was in the throes of a civil war. Two major factions were struggling to control China. The Nationalist Party, supported by the US, had as its leader Chiang Kai-shek (Gittings 1974, 117). The leader of the Communist Party was Mao Zedong. Each party claimed to represent the people of China. The Communist Party eventually won control of Mainland China in October of 1949 and called its nation the People's Republic of China. The Nationalist Party moved its government, along with over 500,000 Nationalist Chinese soldiers, many civil servants, and family members to the island Taiwan.

One of the original and long held goals of the Republic of China was the reunification of China under the Nationalist Party after they fled to Taiwan from the Mainland. Chiang Kai-shek considered the PRC to be an illegitimate government. While the ROC leadership held this view, the PRC leadership did not believe Taiwan would pursue independence. The PRC did not believe the ROC military could undertake an invasion of Mainland China and defeat the Peoples Liberation Army (PLA) in battle. Thus, the PRC leadership could afford to take the long view in the reunification of Taiwan. However, the political landscape on Taiwan has changed.

The Taiwanese, since the arrival of the Nationalist Party in 1949, had only one political party to vote for and were under martial law. In 1987, Chiang Kai-shek's son and successor Chiang Ching-kuo lifted martial law. There now are several legal political parties in Taiwan and no martial law. Lee Teng-hui, President of Taiwan from 1996 to

2000, declared on 9 July 1999 that there was only one China made up of two separate and sovereign government entities, one on the mainland and one on the island of Taiwan. In April 2000, the President-elect of Taiwan, Chen Shui-bian, is a member of the Democratic Progressive Party (DPP) that has historically pressed for independence from Mainland China. During his campaign for president, he changed the stance he had held for years, which was: the ROC should declare independence from the PRC (Yahoo News Singapore 2000, 1). Both he and his party's stance shifted trying to accommodate the goal of sovereignty while not declaring independence. He has displayed a conciliatory attitude towards Beijing by not discussing special state-to-state relations. At the same time, he has advocated the development or purchase of long-range missiles to deter PRC aggression (Clark 2000, 2-3).

The PRC has not liked the changes it has seen develop in Taiwan. The PRC put the Mainland's own democracy movement down in a bloody manner. Meanwhile, Taiwan's democracy has flourished. The PRC did not appreciate the declaration by Lee Teng-hui of the desire for a state-to-state relationship and the fact a member of the DPP won the most recent election for President in Taiwan. The PRC warned voters before the election not to vote for Chen and has continued to threaten to use force to reunify Taiwan with the Mainland (Yahoo News Singapore 2000, 1). The fiery rhetoric coming from the Mainland may indicate that the PRC is losing patience with Taiwan.

From 1995 to 1999, the PRC has held exercises across from Taiwan and occasionally tested nuclear-capable missiles close to Taiwan. Based on Taiwan's desire to join the United Nations (UN), buy advanced weaponry to counter the PRC's missiles,

and its new definition of One China, it is clear Taiwan does not want to reunify with Mainland China. In 1996, the PRC said its nuclear weapon's "No-First-Use" pledge did not apply in the case of Taiwan. The PRC reasoning was because Taiwan is a province of China and this is an internal, not external question (Lilley and Downs 1997, 167). In September 1999, the PRC reversed itself and stated it would not use nuclear weapons to forcibly reunify Taiwan to the mainland. At the same time, however, the Chinese Foreign Ministry spokesman Sun Yuxi reiterated that China stood by its threat to use force if Taiwan tried to pursue independence (Hutzler 1999, 1). A question these actions and rhetoric raises is how long before the PRC does what it has threatened to do and attacks Taiwan? This thesis cannot answer that question, but it will attempt to lay out several plausible military options which the PRC may use in attempting to force Taiwan to reunify and possible US responses.

Methodology

This research thesis concentrates on the military potential of the PRC and provides four possible PRC courses of action to forcibly reunify Taiwan. These four actions in no way represent all of the military options open to the PRC in an attack on Taiwan. They do give an opportunity to compare those courses of actions against capability, which is critical to this thesis. Chapter 5 has a table with those courses of action, along with situations that could change the outcome of each course of action. The postulated courses of action are: naval action only; missile attack only; missile and air attack; and missile, air, and amphibious attack. The events that could alter the outcome

are: whether the PRC achieves surprise, does the US Air Force participate, does Japan give permission to the US to use the US bases on Japan, is the US involved in another conflict, and does the US Navy even get involved. The goal is to analyze each of the proposed PRC courses of action, determine how plausible it would be, based on projected PRC military capabilities in 2004, and present possible responses by the US Navy. This paper will address each of the following major naval warfare issues, as they apply, in response to the PRC military action: antiair warfare (AAW), antisurface warfare (ASUW), antisubmarine warfare (ASW), mine warfare (MIW), and undersea warfare (USW).

Fact, Assertions, and Assumptions

This research paper, based on statements and actions of Taiwan's leadership, declares as fact that Taiwan seeks status as an independent nation-state and does not want to join the PRC under Communist rule. The following items back up this claim. President Lee Teng-hui stated that Taiwan and the PRC should communicate in a state-to-state relationship. The ROC has been trying to regain membership in the UN President-elect Chen Shui-bian and his political party have always pushed for the independence of Taiwan and only recently changed their position. In addition, as of 6 September 1999, twenty-nine countries have official diplomatic relations with Taiwan (Stratfor.com Hotspots titled *Taiwan/Central America*, 0100 GMT, 990906). Thus, Taiwan, with its own military and a completely separate form of government from that of the PRC, is a de facto nation state.

The first assertion is the PRC would prefer to have the reunification of Taiwan occur peacefully through diplomacy. The desire of the PRC to maintain Hong Kong as an area of financial stability and prosperity drove the PRC leadership to ensure the transition was peaceful, noninterruptive, and nonthreatening to the business and manufacturing infrastructure in Hong Kong. There was also a desire to present a pretty picture for Taiwan residents to see. Only the future will reveal whether the PRC will achieve this goal with respect to Taiwan.

The final assertion is that the PRC military will remain inferior to the US military in terms of technology for another two decades. Even now, however, the PRC does have pockets of excellence that are doing very well, such as missile technology. The PRC lacks the industrial infrastructure inherent in a technologically advanced country to catch up quickly with the US. If the PRC did have the industry required to build an advanced military quickly, it still lacks the funds to buy the equipment. Without the money or a modern arms industry, it has to purchase its new military hardware from foreign sources. Specific to this paper, the PRC does not have the means to build a blue water-navy to challenge the US Navy within the near future.

This paper also makes several assumptions for this set of scenarios. First, Taiwan will declare independence in the year 2004 upon the election of a new president who campaigns specifically on a platform of independence from China. One hypothetical reason that could cause such a dangerous political stand could be the nationalization by the PRC of all Taiwanese businesses located on the Mainland. While only the future knows whether Taiwan will actually declare independence or whether the PRC would

nationalize Taiwan's businesses on the Mainland, for the purpose of this paper, Taiwan's declaration of independence will be the starting point of a military conflict between the PRC and Taiwan. The PRC sees Taiwan as a province, albeit a renegade province. Thus, the PRC would consider a declaration of independence by Taiwan to be tantamount to rebellion and would have to take some sort of action.

The second assumption is that the PRC would take military action in response to Taiwan's declaration of independence. The PRC has used force in Tibet and Xinjiang to put down threats to internal order. In Beijing, during the Tiananmen Square massacre, the PRC used force to put down the student-led protests. In 1996, a few months after the elections in Taiwan, a senior Chinese foreign-affairs specialist in Beijing said that Chinese leaders have, historically speaking, always believed in force. He also said "In the Chinese value system, sovereignty, national unification, and preserving the regime have always been valued higher than peace" (Bernstein and Munero 1998, 162). In 1999, when the PRC spokesman said China would not use nuclear weapons in forcibly reunifying Taiwan, he did reiterate that China stood by its threat to use force if Taiwan pursued independence (Hutzler 1999, 1). The type of force used by the PRC will be addressed in chapter 5.

The next assumption involves the US. The US has been ambiguous about the level of support it would give Taiwan in a future military confrontation with the PRC. In this thesis, the US will provide naval and air force units to provide a defense in depth to protect Taiwan from PRC forces. The objective of the US forces is to prevent the seizure

of Taiwan by PRC forces and, where able, to prevent PRC ballistic and cruise missiles from hitting Taiwan.

The fourth assumption is that the conflict between the PRC, Taiwan, and the US will remain limited. Neither the US nor the PRC want to see a conflict over Taiwan result in an escalation that leads to a major war. The leadership and people of Taiwan do not want to see a war take place. This assumption allows the courses of action to use "local war" scenarios only.

Since this scenario will take place around the year 2004, another assumption is that military arms sales to the PRC and Taiwan will continue at their present rate. The PRC will have taken delivery of Su-30s, more Sovremenny-guided missile destroyers (DDG), and Kilo submarines. The ROC military will have acquired some Aegis destroyers and more antimissile and antisubmarine defense systems and will have started to take delivery of recently reworked and upgraded US F-15s.

In the 1995-1996 crisis, the US sent two carrier battle groups to the Taiwan Strait. This paper assumes that the US, in 2004, will send at least two carrier battle groups to help defend Taiwan. The type of PRC attack, whether there is a conflict somewhere else in the world the US is involved in, or other situational changes identified in the methodology section, will determine how much the US Navy will have to do to help Taiwan.

Literature Review

This thesis has a significant amount of information to draw upon. Historians, political scientists, and journalists have written much about the years from 1949 to the present. From 1995, newspapers, magazines, and even the Internet have provided the public much information, almost on a daily basis, about the crises as they have occurred. These crises are somewhat different from previous ones in that those of President Truman and President Eisenhower's days dealt with two entities with the same stated goal of conquering each other. It was harder for them to reach out and touch each other with their weapons, although air raids from Taiwan to the Mainland in response to the shelling of the offshore islands did occur. Today, long-range ballistic and cruise missiles have changed the situation. This section reviews the literature that provides information relevant to this thesis.

Information published in serious periodicals, such as *Jane's Defense Weekly* and *Defense and Foreign Affairs Strategic Policy*, generally provides a thorough analysis of events that have transpired, might occur, or of the military capabilities of the parties involved. *Defense & Foreign Affairs Strategic Policy* has published several excellent articles. One article outlines the strategies the PRC might use to conduct asymmetrical warfare. Another examines the implications of Kosovo on the PLA, specifically the bombing of its embassy in Belgrade.

The Coming Conflict with China, by Richard Bernstein and Ross H. Munro, gives an overview of the historical framework in which the Taiwanese government made the strategic shift away from reunification in its thinking. It deals with the political and business forces within the US that would be for and against US participation in the

defense of Taiwan. It delineates the strategies the PRC has used and might use in order to keep Taiwan from achieving nation-state status. It also deals specifically with the 1995-1996 crisis between Taiwan and the PRC and lays out in a logical format how the PRC arrived at the decision to shift from the diplomatic only front to the military and diplomatic front.

Another work that deals specifically with the 1995 and 1996 crisis is *Crisis in the Taiwan Strait*, edited by James R. Lilly and Chuck Downs. This book uses the insights of many Far East scholars to look at the crisis and the PRC and Taiwan in various ways. It analyzes the militaries of the PRC and Taiwan. How would the PRC modernize to defeat Taiwan and more importantly, the US in a battle for Taiwan? Its authors are experts in their fields and provide critical analysis of the reunification issue from many different perspectives.

One other outstanding work that deals specifically with the crisis that occurred in 1995 and 1996 is *Face Off* by John W. Garver. This book looks more at what transpired diplomatically to cause the PRC to start shooting missiles in the direction of Taiwan. What did the PRC do to become more assertive in regards to intimidating the people of Taiwan as they went to their polling booths to vote for their next president? Studying the 1995 and 1996 confrontation provides key insights into what the PRC might do in a future crisis, as well as what Taiwan and the US may do to force the PRC to back down from its military option.

John Gittings authored *The World and China, 1922-1972*. This book provides valuable reference material about the Chinese involvement in the Korea conflict. The

Peoples Republic of China was a new nation and wanted to receive the respect it thought it should have. The US did not want to acknowledge the PRC. This book gives a glimpse into the thought processes of the PRC leaders as they used the bombardment of offshore islands to try to coerce the US to the negotiating tables. It also shows the type of relationship Moscow had with Beijing. Moreover, it shows some of the previous strategies the US pursued in relation to the PRC, the Korean conflict, and Taiwan.

The Chinese PLA's Perception of an Invasion of Taiwan, edited by Peter Kien-hong Yu, is also an excellent framework for understanding the psyche of the PLA as well as its organization. This book is a compilation of articles written by several authors who have studied the PLA and the PRC. While they do not write from within the PLA, their insights might give a thoughtful analysis of the PLA's perception of a fight against Taiwan. They also address the political power the PLA has within the Communist government structure of the PRC as well as the ability the PLA may display in the open use of its military forces in a fight against Taiwan. The premise of the book is that the PRC would one day launch an invasion if the political and military conditions were conducive. Considering the current state of the cross-strait crisis, this book is very relevant to the research thesis.

Two professional naval publications have many superb articles in them about current and future crises in the Taiwan Strait. They are the US Naval Institutes *Proceedings* and the US *Naval War College Review*. Both magazines have excellent articles on the capabilities of the PLAN and strategies it might use in different scenarios. The 1999 summer edition of *Naval War College Review* has an excellent article about the

strategic implications for the US Navy of the 1996 Taiwan Strait crisis. Other articles in *Proceedings* discuss futuristic strategies the PLAN may develop and how Pearl Harbor could succumb to an undetected biological attack.

There are numerous information-rich sources on the internet. The US Naval War College, US Army War College, and US Air Force Academy have quality information concerning the PRC and Taiwan available on Internet. The Heritage Foundation has information put together by the Asian Studies Center that deals specifically with the PRC and its military capabilities.

There are numerous periodicals, from daily newspapers to prestigious defense-related magazines and strategic policy journals that provide information towards this thesis. *Asia-Pacific Defense Reporter*, *Asian Affairs-An American Review*, *Jane's Intelligence Review*, *Beijing Review,* and the *Washington Times* are just a few of the periodicals that have been found to contain pertinent information concerning this research thesis. The defense-related publications contain information this thesis can use in analyzing the cost the PRC would incur in an attempted forcible reunification of Taiwan to Mainland China. Many periodicals and publications, as well as government articles, are found on the Web and are rich in information concerning the current cross-strait crisis. News articles from the web or in daily newspapers have allowed this thesis to maintain its current nature through March 2000.

There are numerous publications available which have studied the relationship between the PRC and Taiwan and the issue of reunification. However, not many publications deal with the type of support the US Navy would provide to prevent a forced

reunification from occurring. The pattern found in the scholarly works concentrates on the PRC perspective, that Taiwan is a province of China and will be forced to reunify with the mainland, whether the Taiwanese like it or not. The works agree that while Taiwan does have an edge in military technology, the PRC military is so much larger that through attrition the PRC would eventually defeat Taiwan if there were no intervention from the US or Japan.

CHAPTER 2

HISTORICAL FRAMEWORK FROM 1949 TO 1994

US and PRC Relations

There have been difficulties, to include ups and downs, in the relationship between the PRC and Taiwan since 1949. It has been since 1995, when the PRC perceived a strong democracy movement on Taiwan, that the relationship has soured further. From threats, to artillery barrages against offshore Taiwanese held islands, to nuclear capable missiles fired towards Taiwan, the PRC has tried to intimidate Taiwan since 1949. It is important to understand why the PRC feels compelled to push Taiwan towards "reunification" and why, given China's traditional long view of history, the PRC now appears to be losing patience.

Historically speaking, the US did not have a good relationship with Mao Zedong until 1972 when President Nixon visited China. The US was apprehensive of Mao Zedong and his relationship with Moscow. In 1939, Mao's approval of the Nazi-Soviet Pact signed on 24 August 1939, gave the US an indication of what they thought was proof of Mao's support of the Soviet Union. However, during World War II, some US military and foreign service officers were impressed with the Communists and their professionalism in their fight against the Japanese. They tried to get the US to develop a good relationship with Mao Zedong, mainly to help in the fight against Japan. However, Chiang Kai-shek worked very hard to ensure that the relationship between the US and Mao did not improve to his detriment. As a result, the US supported the Nationalists in

their civil war. Ultimately, the US believed Mao's China to be a satellite of Moscow, which could threaten the US's position with other Asian states (Gittings 1974, 100-113, 164, and 170).

A policy of containment in Asia was born from the US desire to not see more countries, especially in Asia, fall to communism (Gittings 1974, 171). The first major test of containment was in Korea from 1950 to 1953 when the US fought the North Koreans and the Chinese to keep South Korea free. At the start of the Korean conflict, President Truman sent elements of the US 7th Fleet to Taiwan to prevent a PRC invasion of Taiwan (Gittings 1974, 182). Relations between the PRC and the US would not get much worse than with each other's soldiers killing each other on Korean soil. In fact, this was the first and last direct US-PRC military confrontation.

Just after Eisenhower was inaugurated as president, he withdrew the elements of the 7th Fleet still in the Taiwan Strait in February 1953 (Gittings 1974, 204). The signing of the armistice for the Korean conflict occurred in July 1953. On 3 September 1954, PLA batteries opened fire on the Taiwan-held island of Jinmen. Mao's intention was to decrease the tensions between the PRC and the US by shelling an island under Taiwan's control (Gittings 1974 197). The shelling of the islands ended up inducing the US to meet with PRC representatives in Geneva on 1 August 1955. Because of those meetings, tensions were somewhat eased between the US and the PRC. As a gesture of goodwill, the PRC released eleven American pilots previously held in China as spies (Yuanchao 1992, 34). Mao's use of limited force ultimately achieved some of the PRC's political objectives. US allies did not want to commit forces to protect an ROC-occupied island.

In addition, the American public did not want to see its military fight the Chinese again so soon after the Korean conflict. Because of the US's noncommittal actions, the PRC forces took the island of Dachen (Yuanchao 1992, 34). Figure 1 is a picture of the current island situation in the Taiwan Strait. The islands administered and claimed by Taiwan have an asterik (*) next to them. Dachen or Tachen, not identified on the map, is approximately three-hundred miles northwest of Taiwan and south of Shanghai, one reason Taiwan probably did not try very hard to defend it.

There was a result, however, the PRC did not foresee or appreciate due to its military action. President Eisenhower pushed forward the approval of the Mutual Defense Treaty with Taiwan. Also, the Congress of the US passed the Formosa Resolution in January 1955 giving President Eisenhower the authority to use the US military to defend Taiwan, to include its outpost islands close to Mainland China. The shelling of the offshore islands backfired on the PRC. The PRC's action pushed the US into a closer military relationship with Taiwan. It also made it much harder for the US and the Nationalists to determine the difference between "Beijing's political motivations from its military objectives" (Yuanchao 1992, 34).

In 1957, the US announced that it would deploy tactical surface-to-surface missiles to Taiwan. Those nuclear capable missiles had a 600-to-650-mile range and were capable of hitting targets in the central part of Mainland China. In addition, Taiwan started the construction of a new air force base that could accommodate US B-52 strategic bombers in central Taiwan. The PRC could rightfully assume it could be the

target of the missiles and B-52s if a shooting war started between the US and China (Yuanchao 1992, 35).

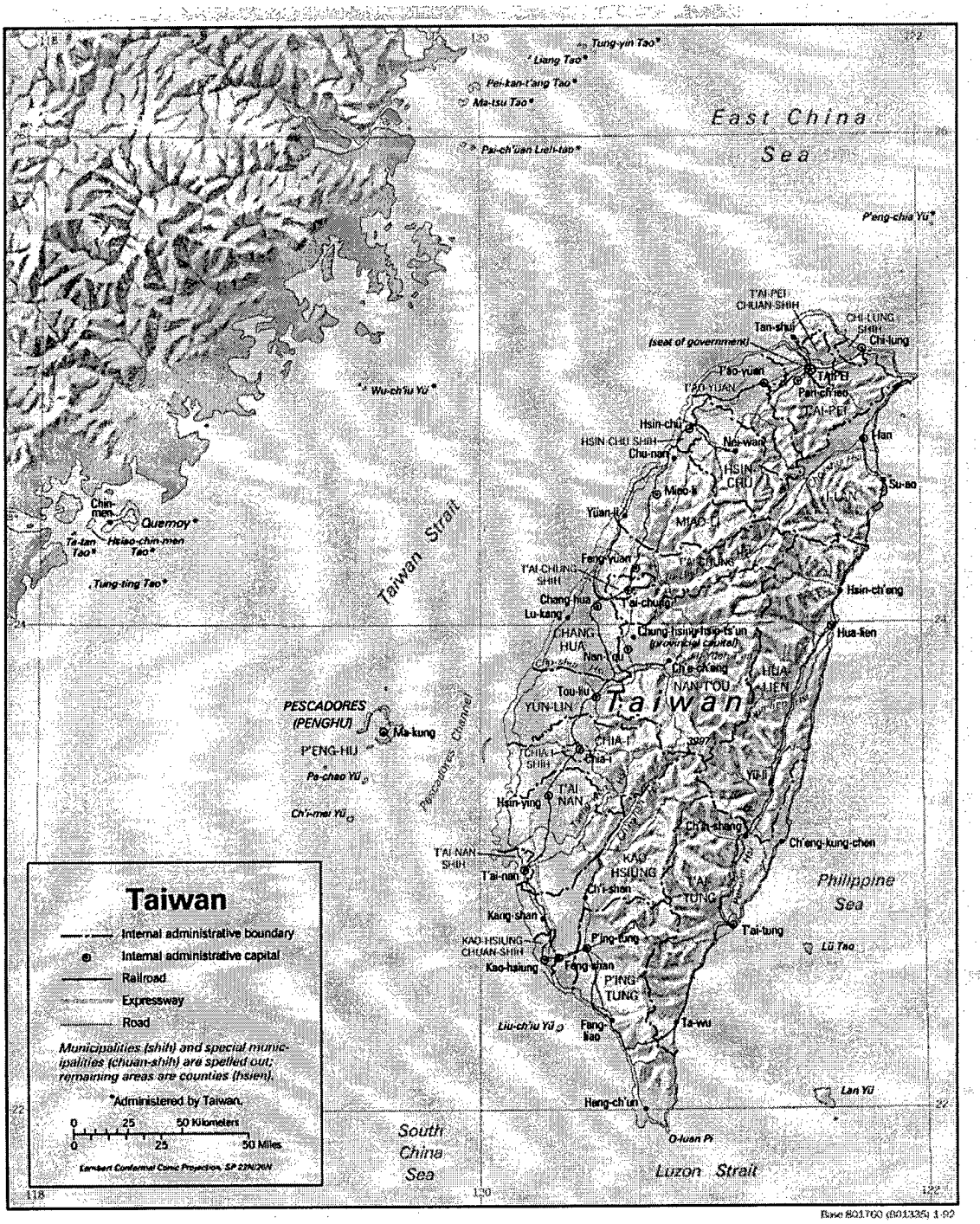

Figure 1. (Available from www.stratfor.com/images/maps/asia/relief/taiwan_r.gif)

In 1958, the PRC started shelling the island of Jinmen once again. This time, Mao did not want to take any islands. Khrushchev, in his memoirs, said he had asked Mao why the PRC had not taken any islands with the 1958 artillery barrage. Mao allegedly told Khrushchev that the PRC only wanted to show the ruling party in Taiwan, the Kuomintang (KMT), the PLA's military potential. More importantly, Mao said the taking of the islands of Jinmen and Matsu would move the KMT beyond China's reach. Mao had concluded that his success in taking Taiwan's offshore islands might lead to the creation of two separate nation states, Taiwan and the PRC. Mao did not want this to happen (Yuanchao 1992, 38).

Again, Mao ended up getting a little more than he bargained for. The US reacted to the shelling by sending two aircraft carriers to the Taiwan Strait. In the middle of September 1958, the US Navy had the largest post-World War II nuclear strike force ever assembled near Taiwan. The USSR and the US escalated tensions to the point that Khrushchev sent Eisenhower a letter stating the USSR would defend the PRC with nuclear weapons, if the PRC was attacked with nuclear weapons by the US. The PRC had not anticipated such an escalation, and as a result, declared a seven-day cease-fire. As it happened, the PRC stopped the shelling after a few weeks and, in October, started what it called "alternate-day shelling," or shelling the islands every other day. President Eisenhower referred to this conflict as the "Gilbert and Sullivan War." This periodic shelling lasted into the 1970s (Yuanchao 1992, 38).

It was not until President Nixon visited China and issued, along with the leadership of the PRC, The Joint US-China Communiqué from Shanghai on 27 February

1972 that the political climate between the PRC and the US started to warm up. In the Communiqué, the US formally declared, "the United States acknowledges that all Chinese on either side of the Taiwan Strait maintain there is but one China and that Taiwan is a part of China. The United States Government does not challenge that position. It reaffirms its interest in a peaceful settlement of the Taiwan question by the Chinese themselves" (*STRATFOR.COM; The Joint US-China Communiqué*, 27FEB72, 4). Because of the goals and the autocratic nature of the two Chinese governments, President Nixon's statement was accurate at that time, but it was also the first time the US formalized it in a US policy statement. Just before this, in 1971, the PRC joined the UN and replaced the ROC on the UN Security Council. The ROC decided to leave the UN, a choice they have probably regretted. The result of President Nixon's visit to China was the thawing of relations in 1973 between the PRC and the US and the reduction of Taiwan's status internationally.

The relationship between the PRC and the US continued to warm through the 1970s. On 1 January 1979, the US and the PRC issued the Joint Communiqué on the Establishment of Diplomatic Relations. President Jimmy Carter established diplomatic relations through this communiqué. At the same time, the cancellation of the mutual defense treaty signed in 1954 between the US and Taiwan occurred (Bernstein 1998, 150).

There were those in Congress who did not feel comfortable with Taiwan's abandonment. As a result, Congress passed the Taiwan Relations Act (TRA) on 10 April 1979 to make it legal for the US to support Taiwan and to "help maintain peace, security,

and stability in the Western Pacific; and to promote the foreign policy of the United States by authorizing the continuation of commercial, cultural, and other relations between the people of the United States and the people on Taiwan" (*STRATFOR.COM; Public Law 96-8 96th Congress*, 10 April 1979, 1). Because of the full normalization of relations with the PRC, the U.S no longer recognized Taiwan as the sovereign government of China. However, the TRA granted the US the legal means with which to continue to conduct business and other types of informal contacts with Taiwan while not giving it the official recognition it had once enjoyed.

The TRA permitted the sale of articles and services to Taiwan that would allow Taiwan to defend itself from an aggressor nation. The act made it clear that the US did not want the PRC to pursue reunification with Taiwan through military means. If reunification was to occur, the PRC must pursue it through peaceful means. If this could not happen peacefully, the US had the option to use force to help Taiwan resist a forceful reunification. Specifically, the US did not want to see anything that might jeopardize the economic, social, or security systems of Taiwan (*STRATFOR.COM*; Public Law 96-8 96th Congress, 10 April 1979, 2).

The PRC was not pleased with the concept of the US providing defensive weapons to Taiwan. However, President Reagan readdressed that issue and changed US foreign policy in favor of the PRC by signing the US-PRC Joint Communiqué of 17 August 1982 that again agreed that there was only one China but also said the US would not carry out long-term weapons sales to Taiwan. The weapons sold would not exceed in quantity or quality those sold since the establishment of diplomatic relations with the

PRC. Most importantly, the communiqué said the US intended to gradually reduce the weapons sold to Taiwan, to allow for a final resolution of the reunification issue (*STRATFOR.COM; US-PRC Joint Communiqué*, 17 August 1982, 1-2). This shift in policy frightened and confused Taiwan while pleasing the PRC. The shift, however, was not based on law, but policy, and US Presidents can and do change their foreign policy.

Another factor, which counts in a republic like America, was American's distaste of the Chinese government's reaction to the students who protested in Tiananmen Square. The American people, were shocked by what they saw: the Chinese military

> broke up a student demonstration by ordering in tanks and armed infantry and shooting to death several hundred, possibly a couple of thousand, of its own people and then, even though the whole world had watched the military action on live television, launched a major propaganda campaign to deny that the killings had ever taken place. When a Chinese man was shown on American television describing what he saw the day of the massacre, imitating the motion of the Chinese soldiers as they had fired their automatic rifles, he was promptly tracked down in a nationwide manhunt and sentenced to ten years in prison for spreading counterrevolutionary propaganda. (Bernstein and Munro 1997, 14)

The massacre ruined the reputation the PRC had managed to build since 1972 in the US with the American people.

In 1992, US policy toward Taiwan began a gradual shift that the PRC did not like. This shift occurred in part because of the PRC's purchase from Russia of twenty-four advanced fighter aircraft, the Su-27, which is comparable to the US F-16 and F-18.

> Chinese discontent with the US Taiwan policy began with President George Bush's 3 September 1992 decision to sell 150 F-16 fighter planes to Taipei. A few weeks later the US Defense Department announced the sale of twelve advanced antisubmarine helicopters. The French government soon followed by agreeing to sell Taiwan sixty Mirage 2000-5 fighters. Those sales represented a significant gain for Taiwan's effort to maintain superiority over the air approaches to Taiwan and were a significant obstacle to Beijing's strategy of gradually shifting the cross-Strait military balance in the PLA's favor. (Garver 1997, 35)

President Clinton, when he was still candidate Clinton, railed at then President Bush about "coddling the tyrants of Beijing" (Garver 1997, 37). However, President Clinton soon found himself in the same predicament as President Bush. Since President Clinton entered office, he tried several times and in different ways to develop better ties between the US and the PRC. As president, he is the foreign-policy decision maker. However, Congress has not always seen eye to eye with President Clinton when it comes to the PRC and Taiwan.

Congress adjusted the president's foreign policy in favor of Taiwan. In 1994, Congress instituted the Taiwan Policy Review and it forwarded to President Clinton Congress's Foreign Relations Authorization Act for 1994 and 1995. President Clinton signed it into law, but did not agree with some of the provisions in the Act.

> The law directed the president to undertake a significant upgrading of US relations with Taiwan. It expressed the "sense of Congress" that the president should send cabinet-level officials to Taiwan "to promote US interests" and that the president should "make clear" US support for Taiwan in international organizations of which the United States was a member. Most egregious of all, from Beijing's perspective, was the law's provision that Section 3 of the Taiwan Relations Act (TRA), providing for US sale of defensive weapons to Taiwan, "takes primacy over statements of US policy, including communiqués" and "policies based thereon." The relevant communiqué was the 1982 arms sales communiqué. (Garver 1997 39)

President Clinton, at this time in his presidency, was trying to pass a comprehensive health reform package and to deal with the issue of the PRC and its status as a most favored nation (MFN). He could not afford the fight with Congress over Congress's Foreign Relations Authorization Act. President Clinton's signature on the

Foreign Relations Authorization Act led the PRC leaders to believe the US was not supporting the PRC in its push for a peaceful reunification with Taiwan.

Democratization of Taiwan: To Scare Beijing

It was not until after Chiang Kai-shek's son Chiang Ching-kuo came to power and lifted martial law in 1987 that fundamental questions about reunification could surface in Taiwan. Three contending points of view concerning the identity of Taiwan that surfaced were:

> (1) Taiwan is an ethnically Chinese state, but one that is liberal and democratic, and therefore quite separate and distinct from the Chinese state on the mainland. Moreover, this separateness should be recognized and accepted for the indefinite future. Eventual unity is the objective. But progress in that direction must not endanger the distinctive polity that has emerged on Taiwan and this concept has been espoused by the KMT under Lee Teng-hui's leadership.
> (2) Taiwan [is] to be a nation distinct from China and destined to assume its proper place among the community of nations. This concept is represented by the advocates of Taiwan independence who suffered repression under the rule of the Chiangs and who came together to form the Democratic Progressive Party (DPP) in 1987.
> (3) Taiwan is indeed a province of China and should be unified with the mainland when China abandons communism and is represented politically by the New Party, which split off from Lee Teng-hui's KMT in 1994, largely over the collective identity of Taiwan. (Garver 1997, 17-19)

Before the lifting of martial law, it was illegal to speak of any goal for Taiwan other than reunification with Mainland China under the rule of the Chinese on Taiwan. The lifting of martial law allowed people on Taiwan to publicly choose and back political parties that stood for ideas they believed in. The old idea that Taiwan would someday unify with the mainland started to take a back seat to other ideas that at one time had been treasonous to speak. The Taiwanese were richer and had more liberty than their

Mainland brethren. They understood that the Mainland Chinese did not have the personal liberties to speak what they thought without threat of retribution. Many Taiwanese now spoke publicly of independence and not reunification.

The PRC viewed those changes with anger. The PRC dealt harshly with the pro-democracy demonstrations that occurred at Tiananmen Square in 1989. If Taiwan's citizens were mobilized against reunification, the problem of reunification would become much more complicated (Lilley and Downs 1997, 24). The leadership of the PRC was and still is used to controlling the media as well as the public's opinion. For them to convince their own people, 1.2 billion-plus, that the massacre in Tiananmen Square never happened was a feat of master media control. If Taiwan allowed its people to choose their own leadership and the direction they wanted to go, the Taiwanese would not be as easy to control as the Chinese on the Mainland are. As a result,

> Beijing watched with dismay as the discourse between these contending concepts of collective self-identity blossomed in Taiwan after 1987. Some leaders within the Chinese Communist Party (CCP) advocated a relaxed, tolerant attitude toward such debate. Historically, however, the CCP has crushed the expression of ideas viewed as challenging its power and policies. After June 1989, the tolerant approach was condemned and orthodoxy upheld by a reinvigorated Party apparatus. From the perspective of the post-1989 CCP, the ideas expressed by the DPP and Lee Teng-hui's KMT were virulent "poisonous weeds." The proper way to deal with such "weeds" was to root them out. (Garver 1997, 21)

In January 1988, Lee Teng-hui assumed power from Chiang Ching-kuo. At the time, as stated earlier, one of the goals of Taiwan was to assume control over the mainland. According to the Taiwan government in 1988, the Taiwanese government was the legitimate government over the mainland and Taiwan.

In the 1990s, the Taiwanese position towards the definition of One China began to change ever so slightly. In April 1991, Lee Teng-hui ended the 1948 National Mobilization for Suppression of Communist Rebellion. In Tapei's eyes, the civil war was over. This was the result of the expansion of economic relations with the mainland and the new competition of political parties on Taiwan (Garver 1997, 27). Lee's government still spoke of One China but now talked about two political entities that should talk as equals. The talk about two political entities was a not so subtle change to the rhetoric but the talk of one China included a very subtle change in how Taiwan redefined its goals.

The PRC did not like the redefinition of One China by Taiwan. Under the previous Taiwanese regimes, the One China policy meant the same thing for both sides of the Taiwan Strait. The new definition had to do with a set of shared characteristics that created a sense of Chinese ethnicity. The PRC's goal was one country with two systems. To the PRC, the new definition smelled of Taiwan's desire to be independent of the Mainland.

In 1993, Taiwan started its drive to join the General Assembly of the UN. Four other countries had joined the UN under similar circumstances. East and West Germany, now Germany, and North and South Korea. In the case of North and South Korea, a peace treaty was never signed, only an armistice. This case closely parallels the case of the PRC and Taiwan. Taiwan, because of a good public relations campaign and shrewd investing of aid packages in foreign capitals, actually had twenty-three members of the UN general assembly vote in Taiwan's favor. From the PRC's perspective, this does not

resemble the machinations of a province intent on reunification, but a province that wants its own independence.

July of 1994 saw Taiwan move further away from the reunification issue. The Taiwanese government issued a

> "White Paper" on cross strait relations. It spoke of "sovereign independence." It was an "incontrovertible historical fact," the "White Paper" said, that the ROC "has always been an independent sovereign state." The "reality" was that China was divided "for the time being" into "two political entities" with jurisdiction over separate territories. Those entities would interact on the basis of equality and mutual respect. The "White Paper" concluded that "the 'two systems' can only be an expedient measure for putting Taiwan at the mercy" of the CCP. Regarding unification, the parties "should not be overanxious and act hastily." The requisite conditions for ultimate unification included the mainland's abandonment of the option of using force against Taiwan and its implementation of liberal, democratic political institutions. (Garver 1997, 29)

There was another item disturbing the PRC leadership. Many of the old guard in the KMT were being replaced by Taiwan born politicians. Many of these next generation politicians were not in favor of reunification with the Mainland and preferred independence (Lilley and Downs 1997, 48).

Taiwan was winning some of the battles for influence with other nations. Granted, these were smaller nations without the influence of a US, Japan, or Great Britain. However, the PRC success in isolating Taiwan from the rest of the world was in the process of changing, one small country at a time. Lee Teng-hui changed tactics and met the PRC head on, copying PRC tactics and using the Taiwanese wealth accumulated due to its rapid and successful industrialization. With the new tactics, the Taiwanese were able to open some closed doors and initiate relationships based on business and investment capital that the PRC could not hope to emulate.

> Through its lobbying efforts on behalf of U.N. membership and diplomatic recognition, Taipei was bidding up the cost of Beijing of retaining influence in various capitals. Since it began giving foreign aid in the 1950s, Beijing's foreign aid program had been used to achieve targeted political objectives, not the least of which were achieving U.N. membership for itself and isolating Taiwan. Beijing thought it had won those battles long ago, and had spent large amounts of money in the process. Then the whole battle seemed to start again. Not only was Taipei much wealthier than Beijing in this new round of competition, but it also had substantial ideological cachet. In the midst of the collapse of Soviet and East European communism, Taiwan was an apparently lovable new democracy, while the PRC was one of the few unrepentant Communist-led states still around. If Taiwan's wealth and prestige were combined, it would be difficult for Beijing to defeat Taiwan politically, and expensive tool. (Garver 1997, 33-34)

These subtle and not so subtle strategies and tactics used by Taiwan did not go unnoticed by the PRC. However, the PRC did not allow its anger or frustration to boil over into military threats until after the US allowed the President of Taiwan into the US to visit his alma mater, Cornell University. Chapter 3 discusses this and other issues that have brought the current crisis to the forefront of world events after 1995.

CHAPTER 3

THE TAIWAN STRAIT CRISES OF 1995-1996 AND 1999-2000

Historical Background Information

The years 1995-1996 and 1999-2000 witnessed PRC military exercises in the Strait of Taiwan whose purpose was to intimidate the Taiwan people, specifically in reference to their upcoming elections. What brought the PRC to this point? With the exception of the every other day artillery firings on the outer islands from the 1950s to the 1970s, the PRC had not made such threatening gestures towards Taiwan since she had threatened to invade Taiwan during Truman's presidency.

In June of 1995, Lee Teng-hui visited his alma mater, Cornell University. His visit was extraordinary in that to receive approval for his visit, the US Congress had to override the State Department's decision not to let Lee Teng-hui into the country. Secretary of State Warren Christopher had given Beijing assurances that Lee Teng-hui would not enter the US to speak at his alma mater. Congress, when they heard of this decision, grew irate and granted President Lee his visa. Beijing then accused Warren Christopher of lying to them. To compound the PRC's embarrassment, President Lee spoke numerous times during his speech at Cornell of the Republic of China (Lilley and Downs 1997, 24). At the same time, Taiwan was launching another new warship and sending some of its Navy to other Asian ports for good will visits. With the cross-strait rhetoric already heated up, the PRC moved from an informational and diplomatic campaign to coercive diplomacy.

In July, the PRC announced a series of military exercises. Several of the exercises involved a series of missile tests. The PLA fired those nuclear capable missiles into a designated target area at sea approximately eighty-five miles north of Taiwan. Because of the tests, the PRC warned sea and air traffic to stay away from that area. Another round of missile tests occurred in the same area later in August. Finally, some of the exercises, war games, and maneuvers looked like a dry run of an invasion of Taiwan. Meanwhile, the PRC made verbal attacks on Lee Teng-hui (Lilley and Downs 1997, 32-33). It appears that one of the main purposes of the PRC exercises was to not only test its military forces, but also attempt to influence the outcome of the presidential election in March of 1996.

In July and August of 1995, the Taiwanese citizens reacted negatively to the PRC exercises and the Taiwan stock market took a plunge, even though the Taiwan government intervened with a cash infusion. During February and March 1996, the PRC once again threatened Taiwan with the use of military force. Even though the PRC conducted military exercises off the coast of Taiwan, this time the Taiwanese government's infusion of funds helped stabilize the Taiwan stock market. The exercises did not negatively affect any other Taiwanese institutions. Viewing the election results in the context of PRC pressure, the mainland efforts were not successful and the result was a legitimization of the democratic process within Taiwan (Yu 1996, p. 64).

President Clinton sent two US carrier battle groups into the Taiwan Strait in 1996. Officially, they were not in the region because of the PRC moves. Unofficially, the PRC interpreted the presence of the carriers as the US taking a stand with Taiwan against the

PRC. Taiwan, wanting to take advantage of the presence of the carriers, leaked the information about them to the press. In this crisis, the US wanted to retain maneuvering room, thus it would not confirm why the carriers were in the Taiwan Strait. When asked why the Nimitz battle group was near the Taiwan Strait, the US Defense Department spokesman said it was to avoid bad weather in the area. A cursory check of weather patterns in the area at the time showed no unusual weather conditions (Yu 1996, 62).

The end of 1996 saw some informal contacts resumed between the PRC and Taiwan. Taiwan's leadership, with the exception of President Lee Teng-hui, continued to travel internationally and promote Taiwan's "Dollar Diplomacy," but the emphasis at home was on peaceful relations and trade with China. Cross-strait trade between the two countries actually posted a modest gain at the end of the year. However, the PRC continued to isolate Taiwan diplomatically. By the end of 1996, the PRC had persuaded South Africa to recognize the PRC and break off relations with Taiwan. Within the UN Security Council, the PRC voted against a peacekeeping mission in Guatemala until Guatemala agreed to reverse its position on supporting Taiwan in its move to join the UN (Lilley and Downs 1997, 37-38). From the end of 1996 to the middle of 1999, the PRC and Taiwan continued to pursue their separate agendas, but the PRC refrained from similar large-scale exercises until 1999 when President Lee Teng-hui again enflamed the cross-strait crisis.

In July 1999, well after the cross-strait crisis of 1995-1996, Günter Knabe, of Deutsche Welle radio, interviewed President Lee Teng-hui. Knabe's first question concerned the security of Taiwan and how President Lee coped with the stress of the

tension and danger caused by China's desire for the reunification of Taiwan with the mainland. President Lee's answer further inflamed the cross-strait relationship.

> I will answer your question from the historical and legal viewpoints. The historical fact is that since the establishment of the Chinese communist regime in 1949, it has never ruled the territories under the Republic of China (ROC) jurisdiction: Taiwan, Penghu, Kinmen, and Matsu. In the 1991 constitutional amendment, Article 10 of the Additional Articles (now Article 11) limits the area covered by the Constitution to that of the Taiwan area, and recognizes the legitimacy of the rule of the People's Republic of China on the Chinese mainland. Thus, the reconfigured national agencies represent only the people of the Taiwan area. The legitimacy of the rule of the country comes from the mandate of the Taiwan people and has nothing to do with the people on the mainland. The 1991 constitutional amendments have placed cross-strait relations as a state-to-state relationship or a least a special state-to-state relationship rather than an internal relationship between a legitimate government and a renegade group, or between a central government and a local government. Thus, the Beijing authorities characterization of Taiwan as a "renegade province" is historically and legally untrue. (Knabe, printed off www 6SEP99, 1-2)

This interview set the tone of the cross-strait crisis of 1999. The idea that Taiwan would consider itself a legitimate government and that the PRC had no legal right to expect the reunification of Taiwan to the Mainland infuriated the PRC leadership. This interview led directly to the military posturing that occurred in 1999-2000 between Taiwan and the PRC.

On 20 August 1999, the PRC cautioned the US not to interfere in that crisis on Taiwan's behalf. The PRC signaled its willingness to use neutron bombs against US carriers in its efforts to dissuade the US from helping Taiwan (stratfor.com titled *China Cautions US Not to Interfere*, 0004 GMT, 990820, 2).

In summary, the democratization of Taiwan and the "Dollar Diplomacy" waged by its leadership set the stage for the crises that occurred in the Taiwan Strait in 1995-

1996 and 1999-2000. Through those crises, both sides sent reunification initiatives to the other. However, neither side could agree with the others proposals. The sticking point for the PRC is Taiwan's definition of One China. It might be a long time before the two sides can agree, as long as the definition of One China remains radically different between the two governments. Fundamental to the PRC in those initiatives is that Taiwan is a province and its government must be subordinate to the PRC in Beijing, just as any other province in China, or Hong Kong.

To Taiwan, those concepts were and are unacceptable. Until the lifting of martial law on Taiwan, when the people of Taiwan could exercise personal liberties, the PRC appeared to be more patient concerning the question of reunification. However, with Taiwan's declaration of intent to deal with the PRC on a state-to-state basis, requiring parity and stating that the PRC does not have the legal right to pursue the reunification of Taiwan to the mainland, the PRC, if it still wants to pursue reunification, may use the PLA or economic leverage to force the issue in its favor.

Comparison of PRC and Taiwan Militaries

The PLA has become serious about building its military up to a point at which the US, or any other great power, would not dare to interfere in the domestic affairs of China, which includes Taiwan (Bodansky 1999, 5). This desire, when looked at in reference to the Taiwan reunification question, poses a serious threat to the Taipei regime. To provide a clearer understanding of the military implications of an attack on Taiwan by the PRC, some pertinent information concerning the differences in their militaries is in order. The

tables give a clear indication of numbers, but do not address other issues such as quality, training, and readiness.

Table 1. Personnel

	PRC		ROC	
	Active	Reserves	Active	Reserves
Army	2,110,000	900,000	200,000	1,500,000
Strategic Missile Forces	90,000			
Air Force	470,000		60,000	90,000
Navy	302,000		60,000	32,500
Military Police			20000	
Coast Guard			20000	
Totals	2,972,000	900,000	360,000	1,622,500
Total Forces	3,872,000		1,982,500	

(Source: *Jane's Sentinel Security Assessment: China and Northeast Asia*, 1999, 76-79, 516, 525)

Table 2. Air Force Fighters and Attack Aircraft

SU-27SK Fighters (F-16)	50	F-16C/D (US) (150)	103
J-8IIs (similar to U.S. F-4)	100	Mirage 2000-5 (France)	60
J-7s (MiG-21)	500	Ching Kuo (ROC) (130)	70
J-6s (MiG-19s)	3000	F-5E/F (U.S.)	270
J-5s (MiG-17)	400	F-104G	115
Total Forces	4050		618
PRC Advantage: 6.5 to 1			

(Source: *Jane's Sentinel Security Assessment: China and Northeast Asia*, 1999, 95, 534)

Table 3. Air Force Transports

Il-76 MD (Russia, new)	10	C-47	8
Il-18 (ex-Soviet)	20	C-130H	19
Il-14 (ex-Soviet)	30	C-119G	40
Y-8	25		
Y-7	30		
Y-5	500		
Li-2 Light Transport (LT)	50		
Y-11 and Y-12 LT	25		
Total Forces	690		67

(Source: *Jane's Sentinel Security Assessment: China and Northeast Asia*, 1999, 95, 534)

Table 4. Navy

Destroyers	18	Destroyers	18
Frigates	37	Frigates	21
Submarines, Attack	64	Submarines, Attack	4
Submarines, Ballistic Missile	2		
Fast Attack Craft-Missile	90	Fast Attack Craft-Missile	50
Naval Combat Aircraft	580		
Naval ASW Helicopters	33	Naval ASW Helicopters	23

(Source: Jane's Sentinel Security Assessment: China and Northeast Asia, 1999, 104, 538.)

Table 5. Plan Amphibious Lift Capability

Amphibious Ship Classes	Speed Knots	No. Act.	No. Res.	No. Total	Lift Troops	Lift Tanks	Lift Tons	Total Troops	Total Tanks
YUTING (Type 74/LST)	17	6	0	6	250	10		1,500	60
YUKAN (Type 72/LST)	18	7	0	7	200	10	500	1,400	70
US 1-511 (SHAN/LST)	11	8	0	8	165		2,100	1,320	0
YUDENG (Type 73/LSM)	14	1	0	1	500	9		500	9
YULIANG (Type 79/LSM)*	14	31	0	31	250	3		7,750	93
YUKAI (Type 74/WUHU-A/LSM)	14	7	0	7	250	2		1,750	14
YUDAO (LSM)*	18	1	0	1	250			250	0
YUNNAN Class (Type 67/LCU)*	12	36	200	236	150		46	35,400	0
YUCH'IN (Type 68/69/LC(U/P))	11.5	8	30	38	150			5,700	0
JINGSSAH II (Hovercraft)*	55	8	0	8	50		15	400	0

* Troop totals estimated.	Amphibious Craft	Troops	Tanks
GRAND TOTALS	343	55,970	246

(Source: *Jane's Sentinel Security Assessment: China and Northeast Asia*, 1999, 104; and *Asia Pacific Defense Reporter, 1999 Annual Addition*, 1999, 61)

Air Force and Navy totals combined give the PRC 4,050 combat aircraft to the ROC's 618. However, most of the PRC aircraft are of 1950s and 1960s vintage. Most do not have the range to fight over the island of Taiwan with any type of loiter capability. First, Taiwan is a 122-mile round-trip from the coast of Mainland China. Secondly, the J-5s, J-6s, J-7s, and some J-8s only have a 370 nautical mile combat radius. Thirteen air bases within 250 miles of Taiwanese territory could handle about 1000 Peoples Lifeberation Army Air Force (PLAAF) aircraft (*Jane's Sentinel Security Assessment: China and Northeast Asia* 1999, 518). However, only those within a 150 to 180 mile distance from the targets in Taiwan would be within effective range for the bulk of the PLAAF. Only two airfields in the Nanjing military district are close enough to Taiwan for these aircraft to fly over Taiwan (Harris 1998, chap. 2, 6). Defense Mapping Agency maps ONC H-12 and ONC J-12, edition eight, show eight airports, six major and two minor, within 150-nautical miles of the western coast of Taiwan. This puts the eastern coast of Taiwan in range of seven of those airports. Not indicated is whether those airfields are military or civilian. There are not enough airfields near Taiwan to allow the PLAAF to use its numerical superiority to its advantage in a shooting war. However, if the PRC, through other means, such as cruise and ballistic missiles, could neutralize the ROC Air Force, even older aircraft could be helpful in a fight.

For Taiwan, the numbers are much smaller in comparison with the PRC, and for that reason, Taiwan has attempted to maintain the qualitative edge in its military technology over the PRC. Table 2 does not show some changes which are likely to occur

sometime in the future: of the 70 F-5Fs, 40 are to be upgraded and retained, 60 additional CHING KUOs still need to be delivered for a total of 130 planned, and 47 F-16C/Ds are still to be delivered. After the upgrades, planned retirements, and delivery of all ordered aircraft, the Taiwanese air force will have only 644 combat aircraft to fly against the PRCs air force of 4050 combat aircraft; however, the edge in quality is definitely on Taiwan's side.

The Taiwan navy is smaller than the PLAN at first glance. In the area of submarines, the PLAN not only has the ROC Navy beat in quantity, but also in quality with the four Kilo class submarines the PLAN purchased from Russia. The PLAN's indigenous surface combatants do not compare well, however, against the ROC Navy's surface combatants. The PLAN has purchased two Sovremenny-guided missile destroyers from Russia with one already delivered. However, four Kilos and two Sovremennys do not make a navy by themselves. In addition, the PRC must defend and patrol over 14,500 kilometers of coastline compared to Taiwan's 1,448 kilometers, a ten-to-one-ratio. This does not negate the advantage the PRC enjoys from a numbers perspective, but it does force the PRC to be careful in how much of its naval force to commit against Taiwan.

This has been just a cursory glance at the capabilities of both the PRC and the ROC. To determine the strategy the PRC might use in forcibly reunifying Taiwan, numbers alone are not a determining factor. Chapter 4 will identify key areas in the PLA, PLAN, and PLAAF that are strengths and weaknesses. Once identified, they will help

determine the types of realistic courses of action the PRC might employ against Taiwan and more importantly, the US Navy.

CHAPTER 4

THE PRC MILITARY: WEAKNESSES, STRENGTHS, AND FUTURE OPTIONS

This chapter will analyze the military options available to the PRC based on its current strengths and weaknesses projected out to 2004. Additionally, since the scenarios will be set in 2004, future PRC capabilities will include continued arms purchased from other nations, such as Russia out to 2004. What must be determined are the advantages or disadvantages the PLAAF, PLAN, and PLA currently enjoy or have to overcome in comparison against Taiwan and the US Navy, and how those capabilities will extend to 2004. What kinds of courses of action would the PLA use, based on those projected future capabilities, if they were to attack Taiwan to force reunification? One school of thought argues the PRC will not be ready for a military confrontation with Taiwan or the US over Taiwan for many years.

One counter to this argument is found in *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*, by Dr. Gawrych. Dr. Gawrych studied a similar situation that occurred less than thirty years ago. In 1973, Israel clearly did not expect another conflict with the Arab states. During the 1967 Arab-Israeli War, the Israeli military did an excellent job of destroying a large portion of the military capabilities of Egypt, Syria, and Jordan. Israel's intelligence service predicted it would be years before the Arabs would be ready to fight Israel again. Yet, in 1973, Egypt and Syria again attacked Israel. Egypt did surprisingly well. Anwar Sadat, the President of Egypt, understood his military could not fight toe to toe with the Israeli Defense Force (IDF) and win.

However, he believed his military could fight a limited engagement against the IDF and do well if Egypt neutralized the IDF's strengths. Sadat, through superb deception planning, surprised the IDF. The IDF anticipated it would have forty-eight hours notice. Instead, it had only six hours notice before the Egyptians and Syrians attacked.

From 1 to 6 October the Egyptian military conducted an exercise along the Suez Canal. During this exercise, they pre-positioned and hid forces and equipment next to the Suez Canal. These preparations were for the Egyptian attack on 7 October. The Egyptians' military engineers only needed nine to sixteen hours, depending on the specific site they were attacking, to breach sand walls on the Israeli side of the Suez Canal. During this time, they were able to move equipment to the Israeli side using pontoon bridges and ferries. The IDF thought the Egyptians would need twenty-four to forty-eight hours to cross the Suez. The IDF expected their air force to stop the Egyptian's advances. The Egyptians prepared a very thorough antiair missile defense to counter the IDF's air attack. As a result, the IDF suffered a severe setback when the Egyptian's surface-to-air missile (SAM) umbrella downed many of their advanced fighters. The IDF underestimated their foe and paid dearly for it. Anwar Sadat prepared his country for victory by concentrating on his military's strengths, acknowledging its weaknesses, and understanding its limitations (Gawrych 1996, 1-82).

The PRC leaders could consider a surprise missile attack against Taiwan as an unexpected move. Just as the IDF underestimated the skill and determination of Egypt, to underestimate or marginalize the PLA would not be wise. In many ways, the PRC is more advanced than the Arab states that took on a much more advanced and better-

prepared foe, Israel, in 1973. One advantage Sadat had over Israel was the surprise and suddenness of the attack. Over a period of several days, he pre-positioned both men and equipment next to the Suez Canal. In a similar manner, the world has gotten used to the PRC's military exercises that take place next to and in the strait that separate Mainland China from Taiwan. The PRC could use these military exercises to stockpile many extra ballistic, cruise missiles, and antiair missiles for SAM sites for an attack against Taiwan. It could try to hide those missiles from Taiwan in underground bunkers, caves, and other hidden storage facilities in a similar manner to what Sadat did in 1973. It would be a mistake, however, to believe the PLA could hide supplies in the same manner as the Egyptians for missile and air attacks against Taiwan. It is possible the PRC could fight a losing battle, militarily, and still motivate Taiwan to proceed with a reunification timetable. Coercive diplomacy is a powerful weapon.

The PLAAF and Egypt's Air Force of 1973 have similar problems. The PRC has not developed the capability to produce its own advanced aircraft. The Chinese aerospace industry is still about thirty years behind the US. Its indigenous fighter the F-10, when and if produced, will be close in capabilities to the US F-16. Actually, the PRC is literally trying to copy an F-16 Pakistan lent the PLAAF. However, it will be 1980s technology in the twenty-first century, about three decades behind US military equipment. Table 1 in chapter 3 provides a chart of the aircraft flown by the PLAAF. Although the PLAAF is large in comparison to the ROC Air Force, the PLAAF suffers from many problems (Harris 1998, Ch. 2, 7)

As indicated in table 1, the PLAAF has almost a 6.5 to 1 advantage in fighter aircraft. However, this does not necessarily translate into an advantage for the PRC. Currently, the aircraft in the PLAAF inventory can only sortie once every four days. The slow turnaround for the aircraft does not bode well for a high-intensity combat environment. The J-5s, J-6s, J-7s, and various J-8s have only a 370 nautical mile radius. These make up the bulk of the PLAAF inventory, 98.8 percent of all PLAAF fighter aircraft (*Jane's Sentinel Security Assessment: China and Northeast Asia* 1999 95). More significant is the lack of airfields in the Nanjing military region. There are only two airfields in range of Taiwan given the combat radius of these older aircraft. As indicated in chapter 3, there are seven airports that PLAAF forces could fly from to attack Taiwan. If most of these airports are civilian, Taiwan and US intelligence services would probably note the buildup of forces. If the ROC military could destroy or neutralize airfields within a 185-mile radius of Taiwan, it could take the bulk of the PLAAF's capability out of the fight. The Su-27s do have the capability to go into harm's way and spend the necessary loiter time over Taiwan to be effective in an air attack role or in defense of a PRC naval force. However, as will be explained later, the PLAAF does not take advantage of the Su-27 capabilities as well as it could (Harris 1998, Ch. 2, 7).

The PLAAF does have a bomber force of about 470 aircraft that could reach Taiwan. Its H-5 and H-6 bombers, older aircraft, can carry payloads of 1,000 and 3,000 kilograms, respectively, a distance of about 1,000 nautical miles. Production started on the H-6 in 1959. It is a licensed copy of the old Soviet Tu-16, first deployed in the Soviet Union in 1955. Some H-5s and H-6s might carry air-to-surface missiles, due to recent

modifications. The current belief is that the PLAAF has not developed or obtained the technology to launch precisionguided munitions (PGMs) from those bombers. Most of the aircraft would drop iron bombs, forcing the aircraft to fly over their targets, a dangerous mission over a sophisticated air defense environment like Taiwan. The PLAAF would have no guarantee the weapons would be accurate or hit their targets even if their aircraft could fly safely over the target (Harris 1998, 10). The PLAAF TU-4, the same as Soviet IL-28 Beagle, is a copy of the older US B-29. The PLAAF has eighty of these aircraft left, and these could reach Taiwan and drop bombs, if not hit by Taiwan missiles shot from Taiwan or from Taiwan fighter aircraft (*Asia-Pacific Defense Reporter* 1999, 60). However, the PLAAF has purchased from Russia twenty-four TU-22 long-range Backfire bombers. The delivery date of the bombers was not available at the time of this thesis but will factor into the 2004 scenarios (Bernstein 1998, 188). If the PLAAF could develop longer-range cruise missiles, those bombers could provide a real and immediate threat to any US surface battle groups near Taiwan.

Airframes aside, the PLAAF does not train its pilots with the same intensity or manner as advanced Western militaries. Most of the pilot training is during the day under Visual Flight Rules (VFR). The hours their fighter pilots are in the air may be one half of those of a US fighter pilot. This does not include the time US fighter pilots spend in simulators, which is excellent training. PLAAF pilots only spend 15 to 20 percent of their flight time concentrating on combat-oriented skills (Lilley and Downs 1997, 225). The pilots use most of their time in the air maintaining basic navigational skills (Harris 1998, Ch. 2, 8).

Sources in the PLAAF and the US believe the PLAAF pilots fly so many navigational flights versus combat-oriented training missions to keep accidental mishaps to a minimum. The senior leadership of PLAAF does this to preserve their careers. Fear of failure plagues the PLAAF leadership. Two examples, one in 1992 and the other in the mid-1990s, reveal what can happen if numerous aircraft go down during training flights. In 1994, the PLAAF Commander General Cao Shuangming was relieved of command because too many aircraft crashed during training exercises and flights. In addition, in the mid-1990s, a duty officer was demoted when seven aircraft of a flight of nine crashed in bad weather. The measure of success for the PLAAF leadership is how few accidents their units have; vice how prepared they are for combat (Lilly and Downs 1997, 225).

Aircraft maintenance is another problem the PLAAF has yet to overcome. A quote from a PLAAF maintenance officer said that the air force plans about 35 hours of maintenance for every hour an A-5 flies. Moreover, another officer said that their F-8s were down over 50 percent of the time due to the maintenance of their radar system (Lilly and Downs 1997, 226). Unlike the US military, where aircraft repairs are broken into three separate categories of squadron-level, intermediate-level, and depot-level maintenance, the PLAAF does all major repairs at the depot level. The PLAAF maintains twenty-first aircraft and engine facilities for these repairs. Except for minor repairs, the aircraft must go to those facilities for repairs.

Maintenance issues also limit training. Engines in the fighter aircraft require their first major overhaul in the 300 to 350 hour range. They need another overhaul at 200 to 250 hours and one last overhaul when they reach another 150 hours. Once the engines

have major failures after the last overhaul, they become scrap. Pilots, in acknowledgment of the engines short life span, do not like to waste time either in the air or on the ground. As a result, the pilots are airborne within three minutes of starting their engines and turn their engines off before they reach the end of their runways after landing (Lilley and Downs 1997, 226).

The maintenance difficulties are directly proportional to the logistics problems that exist within the PLAAF. Three separate problems contribute to the logistics nightmare. First, many standardized parts do not exist. It is hard to believe, but the workers drill most of the holes found in the structural components of the PLAAF's aircraft by hand. It is easier to understand why the level of maintenance accomplished at the squadron level is minor. This type of manufacturing process means most parts are not interchangeable on the same aircraft, something not found in Western Air Forces (Lilley and Downs 1997, 226).

Second, the US military has a standardized numbering system for all of the different parts, repair, and consumable, that make up end items, such as aircraft carriers, fighter aircraft, and tanks. The PLAAF does not have a standardized system. Thus, a maintenance person at a squadron would be unable to verify whether the part ordered for an aircraft was the correct part or not. The result is a lack of motivation to fix aircraft at the lowest possible level (Lilley and Downs 1997, 226).

Third, the logistics problems became worse when the aerospace factories began to pursue nonmilitary products for profit. Those civilian enditems have made the factories much more money than the spare parts ordered by the defense industry. For the F-6 and

some of the older F-7 fighter aircraft, spare parts were and still are hard to come by. About eleven years ago, the Minister of Aviation personally intervened and directed some factories to make spare parts for the F-7-2. Without his intervention, the PLAAF would not have been capable of repairing those aircraft (Lilley and Downs 1997, 227).

Having such a poor supply system will create problems for aircraft that deploy to different airfields. Because of the problems in the PLAAF supply system, squadrons keep one year's worth of supplies on hand for the maintenance allowed at their level. Supplies like tires are at regional depots. Thus, when trying to deploy a squadron of aircraft to a different base of operations, moving those supplies becomes a nightmare. Movement of the parts requires months of preplanning since the spare parts go by rail. The poor logistics and maintenance system are operational effectiveness killers of the PLAAF (Lilley and Downs 1997, 227).

Although the PLAAF has taken delivery of about fifty of the newer Russian-made Su-27 Flankers, with two of them training aircraft, it has had major problems with those planes. Before taking delivery of the planes, PLAAF pilots went to Russia where they received extensive training on how to fly and use the capabilities the Su-27 offered. However, when the planes were ready for delivery to China, the Chinese pilots were not able to fly them home from Russia. Either the Russians did not provide adequate training to the PLAAF pilots, or the PLAAF pilots were not capable of being training as quickly as Russian pilots in the same aircraft. Because of the PLAAF pilots' inability to fly the Su-27 competently enough for cross-country flight, Russian pilots delivered the aircraft to the PLAAF in China (Harris 1998, Ch. 2, 9).

Owning and flying the Su-27 does not mean the PLAAF pilots are able to use the aircraft to its maximum potential. Pilots need flight time in an aircraft and the ability to become well acquainted with and use frequently the aircraft's weapons systems. Because all of the major maintenance and overhauls of the Su-27s take place in Russia, pilots have to keep the flying hours to a minimum. Consequently, the pilots do not fly the aircraft enough to become fully proficient with the aircraft's advanced capabilities. The reduced hours then negatively influence the effectiveness of the fighter aircraft. Finally, the Su-27 pilots apparently do not trust the radar the aircraft came with, which evidently has a range of sixty kilometers. Instead of using the radar, the PLAAF pilots continue to rely on visual detection (Lilley and Downs 1997, 232).

The PLAAF is also in the process of purchasing a very advanced airborne radar system from Israel. This radar, when mounted on an aircraft, may give the PLAAF similar capabilities to the US AWACS airborne warning radar aircraft. It would definitely enhance the PLAAF's ability to manage an air battle over the Taiwan Strait. However, this would be dependent upon the PLAAF mastering the technology and then learning how to coordinate the management of so many aircraft and aircraft weapons releases at the same time (UPI 1999, 1).

To put all of this into perspective, the PLAAF has a large inventory of fighter aircraft, but it is estimated only 40 percent of them are fully mission capable. Most of those aircraft contain 1950's and 1960's technology. The F-10, an indigenous fighter, designed and built within the PRC, will have 1980's technology, but may not be flight tested until 2002 and ready for delivery until 2007 or 2008, if all goes well (Howard

1999, 10). The PLAAF training regimen focuses more on the safety of flight along with navigational skills than combat training. In addition, the pilots who fly the Su-27 Flanker, a superb aircraft of Russian design, cannot push the plane to its limits. It appears the PLAAF would not play a major role in a cross-strait crisis of a lengthy nature. Maintenance and logistics constraints would increase the time between sorties as the planes fly more than normal. The result might make the four days between sorties an optimistic assumption. The PLAAF probably could effect change in a short conflict or in a conflict in which the ROC Air Force had to stay under cover and not fly. Finally, the pilots do not have the training, experience, or confidence in their planes for the PLA to use the PLAAF as an effective combat multiplier in a large-scale conflict with a Western or Western-equipped nation.

The PLAN has some of the same problems the PLAAF has. It has older ships, submarines, and aircraft with antiquated weapons systems. It is in the process of purchasing new and better surface ships, submarines, and aircraft as well as manufacturing some advanced weapons platforms. However, the PLAN, like the PLAAF, has had problems with the newer technologies.

The PLAN submarine force has one nuclear-powered ballistic missile submarine (SSBN), one Golf class diesel-powered ballistic missile submarine (SSB), five nuclear-powered attack submarines (SSNs), four Russian-built Kilo class diesels, one Song class diesel, fifteen Ming class diesels, and sixty-nine Romeo class diesels. The PLAN appears to have an excellent submarine fleet of ninety-five, capable of applying tremendous force to an opposing fleet from under the water. However, the Romeos rarely spend more than

a few days a year at sea due to their age and the lack of trained crews. The Romeo class has virtually no antisubmarine warfare (ASW) capability. The Ming class is slightly more capable than the Romeo class, but still not a great threat. Neither class is a match for US submarines. The five SSNs, the Han class, are noisy and would be easy to find by the quieter US SSNs. The submarines that could provide a formidable offensive and defensive force for the PLAN would be the Kilos and possibly the Song class. The Kilo's are very quiet diesels with superb weapons and sensors. However, the first two Kilos delivered have reportedly had propulsion and battery problems. These problems could be a reflection of the crew's poor handling of the maintenance requirements or the PRC's cost cutting measures enacted during the purchase of the submarines (Lilley and McVadon 1997, 261-262).

The SSBN and SSB provide a unique capability to the PLAN in that they could launch nuclear ballistic missiles from underwater with an estimated range of 1,800 kilometers (1,120 miles). Unless they can sail undetected close to Hawaii or the continental US, it appears they would not be a factor in a future battle ("Jane's Fighting Ships, 1998-1999" 1998, 116). The PLAN has purchased two Sovremenny-guided missile destroyers (DDGs) from Russia for its surface fleet. The PLAN currently has one Sovremenny, just recently delivered. Each of the warships could be armed with eight supersonic 3M82 Raduga Moskit sea-skimming missiles (NATO code-named SS-N-22 "Sunburn").

The Russian Navy built those destroyers as offensive weapons and the missiles, which can carry nuclear warheads, to fight against US carriers and Aegis cruisers and

destroyers. The missiles can travel at a speed of Mach 2.5, fly a very low route, close to the water, and make many "juking" movements. Those movements are to throw off countermissile defense systems, such as the Vulcan Phalanx, the close in weapons support system used on US warships. It is possible, because of the flight pattern the Sunburns fly, that US warships' close in defense systems may only have about 2.5 seconds to destroy the incoming missiles. This may not be enough time against a 750-pound nuclear or conventional warhead (Smith 1999, 2).

The question raised, based on the PLAAF and PLAN past performance with newly acquired Russian systems, such as the Su-27 and Kilo submarine, is: How capable will the PLAN crews be in mastering the weapons, propulsion, and detection systems in the new Sovremenny warships? As described previously, the Chinese pilots who fly the Su-27 Flankers have not appeared to excel at using their aircraft at the full spectrum of the aircraft's capabilities. Based on problems the PLAN had with its Kilo submarines, also purchased from Russia, the purchase of the new Sovremennys may not, at least in the near term, give the PLAN the type of advantage it would like over the ROC or US Navy.

The rest of the PLAN surface fleet is a mix of newer indigenous vessels with many older vessels. They have eighteen DDGs and thirty-six frigates (FF/FFG). Most of the weapons systems on board the DDGs and FFGs are 1960s to 1970s vintage. Those ships lack effective antiair and antimissile defense systems. The Luhu class, a DDG, is looking for another engine to replace the US LM-2500s that were to power the ships. The US government canceled follow-on sales of the engines after the Tiananmen Square massacre. This makes it very difficult for the PLAN shipbuilders since different engines

will have different design, size, and power characteristics. Currently, the PLAN has taken delivery of only two Luhu DDGs (*Jane's Sentinel Security Assessment: China and Northeast Asia* 1999, 104).

The PLAN does not have an aircraft carrier or the necessary battle group forces to protect a carrier. For the PLAN to develop and build or purchase a carrier, the PLAN must also prepare the infrastructure that goes with a carrier. The carrier must be safe from surface, subsurface, and air threats. The PLAN's surface and subsurface forces need substantial upgrades in order to provide such services. A carrier also needs an air wing, composed of many types of aircraft to provide protection, early warning and detection systems, as well as the ability to strike at targets hundreds of miles away. The PLAAF and PLA Naval Air Force (PLANAF) do not have the aircraft or trained pilots to undertake such a mission.

The PLAN's amphibious forces are also not the most modern in the world. Some of their amphibious ships are actually World War II vintage US vessels given or sold to the Nationalist (KMT) Government after World War II. The PRC captured those vessels after it forced the KMT to flee to Taiwan. A more thorough discussion of PLAN amphibious options is in chapter 5.

The PLAN also has its own Naval Air Force. The major difference between the PLAAF and the PLANAF is the navy allows its aircraft to fly over the water. PLAAF Su-27 Flankers might provide air cover for the PLAN in future at sea engagements. The most advanced aircraft the PLANAF owns, fifty F-8-1s and twenty F-8-2s, do not give it a great advantage over ROC Air Force fighters and are less capable than the Su-27. The

PLAN would actually be more dependent upon the PLAAF Su-27, which have the range to provide protection to the Chinese fleet. However, as the PLAAF pilots do not practice flying over water, the capability of the Su-27 to protect the PLAN is questionable.

Currently, the PLAN has two cruise missiles that are copies of the French *Exocet* missile. This type of missile damaged the USS *Stark*, a guided missile frigate (FFG), in the Persian Gulf on 17 May 1987, killing thirty-seven men. The C-801 and C-802 are air-to-surface and surface-to-surface cruise missiles. The C-801 range is about twenty-five miles, and the C-802 has a longer range of about eighty miles (Wortzel 1998 197). The short ranges of these weapons gives the US an advantage over the platforms that would launch those missiles. US weapons platforms would locate, identify, and fire defensive missiles well before those cruise missiles could hit US forces.

At the present, Beijing lacks the capacity to employ over-the-horizon targeting. As discussed previously, the PRC was contracting with an Israeli firm to buy an advanced airborne radar system. The Chinese denied it bought the radar, but Israeli officials have acknowledged the sale (Eckholm 1999, 1). Concurrently, Moscow announced 1 September 1999 an estimated $1.95 billion contract from the PRC to purchase up to sixty Sukhoi Su-30 multirole, two-seat, long-range combat aircraft (Bin Yu 1999, 4). The current schedule for delivery of the aircraft is 2002 (Nolt 2000, 3). With the addition of an AWACS type platform or Russian made Su-30s, the PRC will have gained the technology to shoot at targets over the horizon (Wortzel 1998, 17).

These purchases do not necessarily mean the PRC's military will be able to take full advantage of the new technologies they are gaining. However, the addition of these

systems will provide the PRC with the opportunity to learn how to use modern systems to their advantage. If the PRC were able to greatly extend the range of their cruise missiles to 300 to 500 miles, they would present a tremendous threat to US battle groups east of Taiwan. However, it does not appear the PRC will field such technology by 2004.

The PLAN is a capable force when compared to navies of neighboring countries, such as Vietnam, Singapore, and Thailand. When compared to the navies of the US, Japan, and even South Korea, it is found wanting. The addition of the Kilos and the Sovremennys gives the PLAN a tremendous push forward, but does not allow them to achieve equality or even local parity with the US Navy. To achieve parity, the PRC will need to embark on a massive buying spree or manufacture a large amount of similar platforms. The PRC does not have the money to buy those numbers of platforms and does not have the technological know-how to build these systems. As a result, the PLAN has to make the transition to a world-class blue-water navy in a slow fashion.

Within the PLA, the Second Artillery (SA) is working on solutions to the Taiwan problem. The SA is the military force that controls land-based, air-deployed, and submarine-launched ballistic systems. It also has missile defense and surveillance stations under its command (*Jane's Sentinel Security Assessment: China and Northeast Asia* 1999, 78). Of all the branches of the PLA military, the SA has the potential ability to force the reunification issue with Taiwan using its ballistic missiles. The SA has been concentrating on missile development, both ballistic and cruise missiles. The PRC understands that many cheap but fast and powerful missiles could overpower a more technologically advanced country's antimissile defense system. Su Zian wrote an essay

titled "Strategies to Minimize the High-Tech Edge of the Enemy" in China's *Xian[d]ai Bingoi* [Bingqi] (Modern Weaponry) that recommends attacking superior technology and greater forces, such as carrier battle groups, with cheaper weapons utilizing ballistic and cruise missile technology in saturation attacks. "For a [low tech] country on the defense," he states, "surface-to-surface tactical ballistic [and long range cruise] missiles are a fine offensive weapon in that they present a major threat to the enemy and could pin it down" (Ahrari 1998, 36).

The Dong Feng 15 tactical ballistic missile could be the weapon of choice for the PRC in the next few years. The missile can carry a nuclear or a 1100 pound conventional warhead. The nuclear warhead could be a 10-kiloton neutron warhead or a 20-kiloton tactical nuclear warhead. The Dong Feng 15 has a 360-mile range. If the Chinese could develop active targeting, not feasible by 2004, the PRC could use these missiles against threats at sea (Fisher 1999, 8).

It also appears the SA may be placing more emphasis on nonnuclear warheads. If the longer range ballistic missiles, such as the Dong Feng 21X or the Dong Feng 25, carried nonnuclear warheads and increased their accuracy through the use of terminal guidance systems and real-time targeting from radar satellites, the SA could possibly target carrier battle groups. The Dong Feng 21X and the Dong Feng 25 have 1,200-mile and 1,500-mile ranges, respectively (Fisher 1999, 10). Even a carrier battle group, unless protected by a future version of a sea-going TBMD system, might not shoot down every incoming ballistic missile. However, as stated previously, this advance in technology is not realistic for the PRC to achieve by 2004.

The PLA ground forces today, unless they plan to conduct a massive invasion of Taiwan, will not be a large factor in a battle to reunify Taiwan, with the major exception of the SA. Parts of the PLAN and PLAAF might be partially effective in a fight against Taiwan. The SA potentially could take the fight to Taiwan with its advanced missiles. Overall, the PLAN and PLAAF will probably not be effective unless the SA can neutralize the ROC military, specifically the ROC Air Force. Based on technology and ability, it appears the SA is building up towards providing saturation missile attacks against Taiwan to allow its sister services to try to hold their own against a better-equipped foe. Chapter 5 will develop this analysis further and create four possible PRC courses of action to try to reunify Taiwan with Mainland China. Possible responses from the US Navy to each PRC course of action will follow.

Since the scenarios in chapter 5 presumably take place in 2004, the extension of current arms purchasing practices will cover the future date. Table 6 shows the new totals of the advanced weapons systems the PRC and ROC might have obtained.

Table 6. PRC and ROC Military Hardware Additions Through 2004

PRC		ROC	
Su-27 (Russia)	10	F-16 (US)	00
Su-30 (Russia)	0	F-15 (US)	5
TU-22 (Russia) Backfire Bombers	4	Mirage 2000-5 (French)	0
Kilo Submarine (Russia)	0	Type 209 Diesel Submarine (German)	
Sovremenny Destroyer (Russia)		Aegis Destroyers (US)	
		ET-2 Hawkeye 2000E AEW Aircraft	
		Stinger Missiles	900
		Harpoon Missiles	4

Not included in this table is the advanced missile and antimissile systems both countries will continue to develop or purchase. The PRC will continue to pursue the development of cruise and ballistic missiles that could accurately hit targets in Taiwan that are critical to the defense of the island. It will also work on developing a substantial inventory of all kinds of nonnuclear missiles with which to threaten Taiwan. At the same time, Taiwan will continue to buy more advanced antimissile defense systems from the US while working on the development of its own TBMD system. The antisubmarine equipment Taiwan will continue to purchase is also not included in this table. Although the ROC Navy will not be on par with the PRC Navy in terms of submarine capabilities because of the advantages the Kilos give the PLAN, the ROC Navy will continue to have the ability to successfully interdict PLAN submarines around the coast and port cities of Taiwan.

During the period 2000-2004 there will not be radical changes in the capabilities of the PRC. Unless the PLA changes maintenance, logistics, and training programs drastically in the next year or two, those issues that hurt combat effectiveness today will hurt the PLA four years from now. In addition, problems PLA defense industries have absorbing advanced technologies will not go away overnight. Those complicated issues could take many years to resolve. Chapter 5 will continue to examine these same issues as it lays out and analyzes some possible PRC courses of action to force the reunification of Taiwan.

CHAPTER 5

POSSIBLE PRC MILITARY COURSES OF ACTION AGAINST TAIWAN AND ROC MILITARY AND US NAVY RESPONSES

This chapter presents possible PRC courses of action to subjugate Taiwan and gives an analysis as to the plausible US Navy responses. It uses the assumptions outlined in chapter 1 for a PRC attack on Taiwan in 2004. The PRC would attack Taiwan, based on the first assumption in chapter 1, because Taiwan has declared independence. This happened after Taiwan elected a new president who ran promising to declare independence if victorious. The people of Taiwan voted overwhelmingly for the independence candidate since they felt they had nothing to lose and everything to gain after the PRC nationalized all of the Taiwan owned or supported businesses on the Mainland six months previously. On the Mainland, the Communist Party leadership sees the need to act or lose face and prestige among the Chinese people. The PRC leadership believes that their ability to cow the Chinese masses and maintain the dictatorship of the proletariat will fatally weaken unless they act quickly to force the Taiwan government to reverse its move towards independence. The problem is what action will achieve this result.

The following scenarios uset 7 shown below. The objective of each PRC course of action is the reunification of Taiwan with the Mainland. However, this does not mean the PRC believes that military action by itself will force the reunification. The purpose of

these actions is to coerce the people of Taiwan to force their leaders to enter into negotiations that lead to a form of reunification the PRC can accept. Some of the military actions that follow do not necessarily lend themselves to winning a war to reunify +Taiwan to the PRC. When the PRC fought Vietnam, according to some historians, the PLA did not appear to win the conflict; yet, Vietnam did pull out of Cambodia, eventually. Using the same logic, the PRC might accept large losses to achieve the goal of reuniting a lost province. Military power is a powerful weapon in coercive diplomacy.

Table 7

PRC Courses of Action/Changes to US Navy Response

Situational Changes Per Scenario (across) => Possible PRC Actions (down)	PRC Attack: Surprise / Not Surprise	US Navy needs US Air Force help	Japanese Permission for US Forces to use Bases in Japan	US involvement in Major Theater War (MTW) or Smaller Scale Contingency (SSC) somewhere else during PRC Attack	ROC military forces sufficient (US forces not involved)
Naval Action Only	Yes/No	Yes/No	Yes/No	No/MTW/SSC	Yes/No
Missile Attack Only	Yes/No	Yes/No	Yes/No	No/MTW/SSC	Yes/No
Missile and Air Attack	Yes/No	Yes/No	Yes/No	No/MTW/SSC	Yes/No
Missile, Air, and Amphibious Attack	Yes/No	Yes/No	Yes/No	No/MTW/SSC	Yes/No

In these scenarios, US carrier battle groups will be the weapon of choice for the US leadership. Today there is no normal set of ships that make up a carrier battle group. Therefore, in the US Navy responses to the various possible PRC courses of action presented below, each carrier battle group will consist of one carrier, two Aegis ships, two ASW ships, one SSN, and one support ship. The Aegis platforms could be two guided missile cruisers (CG), two DDGs, or one of each. The ASW ships could be two destroyers (DD), two FFGs, or one of each. In 2004, Aegis platforms may still not be capable of destroying incoming ballistic missiles. For the purposes of these scenarios, the US and ROC Aegis ships will only be able to track, target, and destroy incoming non-ballistic missiles.

PRC Course of Action One: Naval Conflict Only

In the first course of action, the PRC is only using the PLAN to attempt to force Taiwan to reunify. In the year 2004, the PLAN has not yet achieved the level of excellence it desired. It has acquired five Sovremennys, ten Kilos, and twenty-four Su-27s for the PLANAF. These weapons platforms are still state-of-the-art compared to indigenously produced PRC weapon platforms. The PRC submarine fleet has shrunk. The PLAN scrapped more than one-half of the older Romeo submarines due to lack of trained personnel, spare parts, and precious operating funds. The Romeos that are left can barely get under way and are reserve platforms. The PRC was only able to build one Type 093 SSN, an additional Song class, and four Ming class submarines.

In order for the PRC to successfully use the PLAN to force the reunification of Taiwan to the PRC, the PLAN will have to use surprise and throw caution to the wind in the beginning stages of a conflict involving only naval action. The PRC could not afford to go head to head with the ROC Navy. The weapon systems on the ROC platforms have an advantage in range over the PRC weapons systems. Thus, for a conflict like this to be successful, the PRC must use surprise.

The PRC would use a series of naval exercises only to deploy their forces into the Taiwan Strait. It is probable neither Taiwan nor the US would think the PRC would be foolish enough to start such a confrontation with naval forces only. However, given the right circumstances, this course of action, while not achieving reunification in the short term, may encourage it within a few years.

The objective of the PLAN is the destruction of the ROC Navy and the closure, for a limited time, of major commercial shipping ports. With Taiwan only about 100 kilometers from the Mainland, distances are not a negative issue for the PLAN in an offensive role that incorporates deception and surprise. If the PLAN could destroy the ROC Navy, the people of Taiwan may start to think they are foolish in trying to pursue a course of independence away from the Mainland. The PRC ultimate goal is to force a peaceable reunification in the future.

The PLAN's mine-laying submarines would deploy with mines the day before the attack is to take place. Just before the attack, the PLAN submarines would mine Taiwan's vital shipping ports to force commercial shipping away from Taiwan. When the attack started, the PRC would announce to the world it was conducting a mine-laying

exercise near commercial ports of its Taiwanese province and those ports would not reopen until a date still to be determined.

Missiles launched from DDGs, FFGs, and the six SSNs would signal the start of the attack. The goal would be to catch the ROC Navy by surprise and destroy as much of the ROC Navy as possible in the attack. The PLAN would also target as many ASW platforms as possible in the first strike to ensure greater survivability of the PLAN submarines after the strike. PLAN submarines not involved in the mine laying would deploy into predetermined positions to attack ROC naval vessels as they try to return to or leave their homeports after the initial attack. With a majority of the ROC surface navy perhaps out of commission, the PLAN would head back towards the mainland as quickly as possible to get under the cover of the PLAAF and the comprehensive SAM umbrella on the Mainland. The PLAN's secondary objective is to keep its force intact and see it get back to the safety of its homeports.

US Navy Response to Course of Action One

In 2004, the PLAN will not be sufficiently prepared to fight the US Navy head to head. The ranges of the US detection systems and weapons give the US Navy the ability to stand off from the PLAN and attack individual units while staying out of the PLAN's weapons range. It is highly unlikely that the PLAN would attack US carrier battle groups with the PLAN surface fleet. The PLAN recognizes its ships would become targets well before they could launch their own weapons. Thus, in this first scenario, if the PRC did

achieve its surprise, it is highly possible the US Navy would not even become involved in a direct conflict with the PLAN.

This scenario does not require the use of air force assets to fly in direct support of the navy. Because of the PLAN's actions after the attack, to flee towards the Mainland and the safety of their ships' ports, the only major issue the US Navy would face would be the removal of mines from around the ports of Taiwan. The ROC Navy should have sufficient mine clearing assets left to clear those ports. The US Navy would provide protection to those assets through air and surface assets. In addition, whether the US Air Force helped or not, Japan did or did not give permission to use forces based out of Japan, or whether the US Navy was involved in another conflict, the end result would be the same. The US Navy would not involve itself in a shooting war, but would provide force protection to Taiwan and its surviving naval forces, especially the assets involved in clearing PRC mines from ports.

Conclusion to Course of Action One

This scenario only works if the PLAN can surprise the US and the ROC Navy. If the ROC Navy knows the PLAN is planning an attack, or determines an attack is about to take place, it would have time to prepare adequate defenses to protect its ships while counterattacking the PLAN and probably overpowering it. Although this course of action could be successful with surprise achieved, it is not likely the PRC leaders would approve such an action.

If the PLAN was not able to achieve surprise, the result of the attack would probably be significantly different. The ROC Navy, using its Aegis DDGs to protect its navy, should be able to stop most of the incoming surface-to-surface missiles. The close in weapons systems (CIWS), such as the Phalanx Mk 15 CIWS, could stop those missiles that got past the Aegis antimissile defense systems.

With most of the PLAN missiles destroyed, the ROC Navy could counterattack those units that launched missiles. In the counterattack, it is highly probable the PLAN ships, with the possible exception of some of the Soveremennys, would take hits. They might be able to stop some of the missiles fired in a counterattack. However, this would be a nonissue if the ROC Navy, along with its air force, launched so many missiles at the attacking forces, that the ROC missiles overpowered the Sovremenny missile defense systems. Vital to the PLAN ships' safety is how long it takes them to reach the protection of the SAMs on the Mainland. This will depend on where the PLAN ships had to go to target the ROC ships. If the ROC ships were operating east of Taiwan, then the PLAN ships may have to steam for three to five hours to get back to safety, under the protection of shore based SAMs. If the ROC Navy was close to port, or in the Taiwan Strait, many of the ships could fire their missiles from the cover of the shore based SAMs.

PRC Course of Action Two: Missile Attack Only

This course of action finds the objective of the PRC the same: the future reunification of Taiwan with the Mainland. To achieve this, the PRC leadership has

decided to attack using missiles only. Their attack will center on military targets, such as: air and antimissile defense sites, advanced warning radars, Aegis DDGs, air force bunkers housing the ROC fighter aircraft, and runways those fighters would fly from. The PRC leaders know they will not defeat Taiwan in a battle. As in the first course of action, the PRC wants to prove that the ROC military is unable to protect Taiwan from the PRC. The goal of this military action is to ensure a reversal in the independence movement and a movement towards reunification.

By 2004, the PLA SA has built an extensive arsenal of cruise and ballistic missiles. The SA uses many of those missiles in this attack. Those missiles, like the mobile SCUDs the Iraqis used during the war in the Persian Gulf, are hard to find and destroy. The PLA took the lessons learned from the defeat of Sadaam Hussein and hid its missiles and launchers in well-protected sites. In addition, the use of decoys spread throughout the regions colocated near the hidden missiles reduces the chance the ROC military will hit real missiles in counterattacks.

The timing of the attack is also critical in this course of action. Important to PRC success will be the destruction of the Aegis ships, antimissile defense sites and long-range radar sites, and keeping the ROC Air Force grounded. The optimum time for an attack would be when all four Aegis DDGs are in port. The goal is to destroy as much of the ROC military as possible without a successful ROC counterattack. Although the ROC radar systems will provide warning of the attack, a multitude of missiles directed towards the Aegis DDGs and the antimissile defense sites could neutralize many if not all of those targets. Once the PLA has confirmation of the damage to the Aegis DDGs, the

SA would concentrate on keeping the ROC Air Force out of the air while continuing to attack antimissile defense sites. This action allows the PRC to prove to Taiwan the ineffectiveness of its military in protecting Taiwan.

Before the attack, the PLA would deploy SAM sites in the regions adjacent to Taiwan. The PLAAF fighters would not go out of the area covered by the SAM sites, thus forcing ROC pilots into well-defended air space to attack targets on the Mainland.

US Navy Response to Course of Action Two

This PRC course of action does not find much use for US carrier battle groups. Unless the PRC launched missiles against US warships, the US would probably not attack the Mainland or the missile launch sites. However, the Aegis platforms that accompany carrier battle groups would protect Taiwan from further missile attacks, with the exception of ballistic missile attacks.

If the ROC or US did know the PRC was preparing to launch missiles at Taiwan, the ROC could take some preventive measures to protect some of its military assets. First, the ROC Navy would deploy to allow the Aegis and other ships to prepare for defending Taiwan from incoming missiles. A moving target is harder for ballistic missiles to hit. Second, the deployment of mobile antimissile defense systems could force a shift in targeting by the PLA to the systems on the move, vice fixed sites. This would cost the PLA extra missiles to achieve the same or lesser level of destruction a surprise attack might achieve. Third, the ROC Air Force would deploy its E2C Hawkeyes in round the clock coverage to give Taiwan additional early warning of the

impending attack. The ROC Air Force would have fighters ready to lift off to counter attack the Mainland, once the PLA attack started.

The US Air Force, in a missile only attack, would not need to assist the US Navy since no fight would materialize between PRC and US Navy forces. This also means the US may not need to ask Japan for use of its bases in assisting Taiwan against the missile attacks. The key for the US Navy will be identifying incoming missiles, where they are heading, and if the navy's Aegis platforms can stop the missiles. The carriers' E-2C Hawkeyes would provide over-the-horizon detection for the Aegis ships.

As in the first course of action, US involvement in a MTW or SSC should not negatively affect how the US Navy could respond to the missile attacks on Taiwan. The impact an MTW could make might involve the timing for the carrier battle groups to arrive. If an MTW involved the Persian Gulf and five carrier battle groups were supporting that action, it is probable the time for two carrier battle groups to close with Taiwan could increase. If the USS *KITTY HAWK*, stationed in Japan, is in port and not deployed to the MTW, it might be able to deploy almost immediately, depending on weapons load out, yard periods, and other scheduling issues. If there are no constraints on immediate deployment, the USS *KITTY HAWK* could reach Taiwan in 3 1/2 days. If a carrier battle group comes from Seattle, it will take it approximately 14 1/2, and 16 1/2 days from San Diego.

The US Navy Aegis ships could provide a valuable service to Taiwan in a missile only attack. If the Aegis platforms are effective in knocking out cruise missiles and some ballistic missiles, they could provide a credible defense to the island, while remaining

mobile. If the ROC Aegis platforms had survived the attack, the PRC might not continue the attack. In addition, the US carriers would stay well off the eastern coast of Taiwan out of the PRC missile range and still provide effective radar information to the ROC military with US Navy E2-C Hawkeyes.

Conclusion to Course of Action Two

The PRC, using missile attacks only, could damage the military infrastructure of Taiwan. However, the number of missiles the PLA has in its inventory limits what the PRC can accomplish, and ROC mobile targets could be hard to hit. If the PRC can maintain surprise and pick a time to launch the attack when all four Aegis DDGs are colocated the PLA could then shift more quickly to other antimissile defense systems. However, if the ROC Navy could protect its Aegis ships, or if the ROC received sufficient warning and moved the ships out of harm's way but still close enough to interdict many of the incoming missiles, the PRC may not achieve the military gains desired and still have to deal with worldwide condemnation.

The ROC could counterattack and send missiles towards the Mainland. However, those ROC attacks would probably attack known military sites vice the mobile missile launchers used in the attack against Taiwan. If Iraq could keep its SCUD launchers hidden from Western powers during the Gulf War, the PRC should be able to hide its mobile missile launchers from ROC and US intelligence gathering assets.

The key to a PRC victory would be to knock out much of the ROC antimissile defense system as quickly as possible. The PRC objective is reunification. To reach this

goal, the PRC will use its military. However, the PRC leadership does not want to destroy Taiwan, but prove to the people of Taiwan that the ROC military cannot protect Taiwan. If PRC missiles can fly into Taiwan unimpeded and the ROC Air Force is kept from flying because of the damage to airfields and aircraft, it is possible the PRC could achieve its goal of negotiations for reunification of Taiwan to the Mainland.

PRC Course of Action Three: PRC Missile and Air Attack

Course of action three is similar to course of action two in several respects. The objectives of the missile attack are the same, to take out as much of the antimissile defense systems as possible, not allow the ROC Air Force to fly, and force a future peaceful reunification of Taiwan with the Mainland. The difference in this course of action is the inclusion of the PLAAF in the attack on Taiwan. For this to work the PLA must neutralize the ROC Air Force, as well as antiair systems around the island and resident on the ROC Navy ships. This is actually harder to accomplish than the missile only attack. The number of PLA missiles available for the attack remains constant, but the number of ROC targets increases to ensure the safety of the PLAAF pilots flying near Taiwan to fire their weapons. Thus, this course of action adds more risk to the military action than the missile only attack.

In this kind of attack, surprise again is crucial to the success of the PRC attack. The ROC Navy has good antiair defense systems onboard its non-Aegis ships. The ROC Navy could provide an effective mobile antiair defense for Taiwan against PLAAF aircraft. The PRC must neutralize the ROC Navy for the PLAAF to have a freer hand

over Taiwan. As in course of action two, the PRC must neutralize the Aegis ships for the missile and air attack to work. The Aegis ships have excellent antiair and antimissile defense systems.

With more targets to aim at, it will be equally important for the PLA to successfully hit the ROC airfields to keep the ROC Air Force out of the air. With the warning the ROC will have once missiles are in the air, it is possible some of the ROC Air Force will take off in response to the attacks and be able to interdict some of the PLAAF aircraft. A key to the ROC Air Force maintaining a presence in the fight will be keeping the airfields open, or possibly using alternate airfields and roadways as military airfields not targeted by the PLA. Depending on the types of warheads used by the PLA, the frequency of attacks on airfields, and what types of repair runways need, this could be a difficult task for the ROC.

This course of action requires the deployment of large amounts of PLAAF fighters to regions close to Taiwan. Plausible excuses the PRC could offer would be exercises in those regions. However, when large PLA exercises take place, the ROC military generally increases its state of readiness, just in case an exercise turns into an attack. Thus, for this course of action to work, the PRC must fly the Su-27 aircraft from airfields not adjacent to Taiwan, maybe close to the limit of their ranges. After the initial attack, the aircraft could then land in the closer airfields and prepare for additional attacks, at the closer range. A small number of aircraft on normal deployment to the closer airfields would also participate in the initial attack.

The Tu-22 Backfire bombers, with their long ranges, could attack from airfields deep in China's interior. With their speed, they will give a definite advantage to the PLAAF in the attack of Taiwan, if the missile attack neutralized the ROC antiair defense systems. The PRC leadership would not send such expensive assets into harm's way unless they thought they would win or the bombers could make it home without substantial losses.

US Navy Response to Course of Action Three: PRC Missile and Air Attack

This PRC attack almost ensures a direct confrontation between the US and the PRC, if the PRC is still attacking Taiwan when the first carrier arrives off Taiwan. Again, key to the ROC military survival is whether the PRC could achieve surprise in the attack. If the PLA succeeds in an accurate missile and air attacks on ROC airfields, pilots barracks, and any other key sites the ROC Air Force depends upon in order to launch its fighter aircraft, the ROC Air Force may not have much left to fight with. If the PRC did surprise Taiwan and the US, the job of the US Navy becomes more difficult. Carrier air wings carry a complement of about forty-six fighter aircraft. With two carriers present, this would give the US and ROC a total of about ninety-two US aircraft, in addition to surviving ROC Air Force aircraft, with which to defend Taiwan from the PLAAF. Considering that the two carriers would have to rotate in order to provide twenty-four hour coverage, only forty-six US fighters would be available at a time to defend Taiwan. Depending on what ROC forces survived a successful surprise attack, this is extremely thin coverage. In addition, the carriers would have to sit well east of Taiwan to protect it

from the Su-30s and the TU-22s, reducing loiter time of the aircraft over Taiwan. If the PRC did achieve surprise and its military objectives, the PRC may stop the attack as the first US carrier arrives near Taiwan.

If the PRC did not achieve surprise, the situation would change immensely. With the ROC Navy's advantage in antiair defense systems, the PLAAF would lose many planes in the initial attacks on Taiwan. The US would still send the carriers to a position well east of Taiwan, but the carrier aircraft would fly in a support role to the ROC Air Force. This would ease the burden of the ROC and force the PRC to decide how to deal with the US. If the PRC chooses to fight, US fighters will find themselves attacked by PRC fighters. In an air battle, US fighters have detection systems and weapons with a longer standoff range than PRC aircraft, to include the Su-27 and Su-30. The Tu-22s could still be a threat to the carriers, but ROC Air Force control of the air space around Taiwan would reduce the threat.

The US Navy could use the US Air Force's help in this course of action. Key to this help would be permission by Japan to use US bases in Japan. If Japan did not grant permission, the Air Force aircraft would have to fly out of Guam. This would reduce the effectiveness of the support the Air Force could provide the Navy. In addition, if the Japanese did not allow the US Navy forces to re-supply in Japan, especially after operations around Taiwan, this would pose challenges to the US's ability to resupply their ships. A key to this course of action is Japan granting the US permission to use those bases in this conflict.

If the US were involved in an MTW elsewhere in the world, the US Navy's ability to reach Taiwan in a timely manner would be seriously affected, especially if the PRC achieved surprise. An SSC should not have the same negative result. If the *USS KITTY HAWK* is in port, it could arrive within 3 1/2 days. In order to ensure round-the-clock flight deck operations, at least one other carrier battle group will need to deploy to Taiwan as soon as possible. If a carrier is ready to deploy on the US west coast, it could arrive within 14 1/2 days to 16 1/2 half days. The timing will depend on deployment schedules, where the carriers are when the attack occurs, and if a MTW is happening, how many have already deployed elsewhere.

In this course of action, the US Navy could end up fighting in an AAW conflict in a missile-rich environment. Because the carriers would be launching aircraft to protect Taiwan, the Aegis ships would not move forward to add their capabilities to the Taiwanese to protect Taiwan. Their first responsibility would be to protect the carriers. The Aegis ships would save their weapons to shoot down incoming missiles possibly launched by Tu-22s or other aircraft that might get within attack range of the carriers. With attacks on the carriers a distinct possibility, even some of the carrier fighter aircraft would stay near the ships to provide protection.

Conclusion to Course of Action Three: PRC Missile and Air Attack

Again, as in the previous courses of action, surprise is still the most important factor. The PRC will not have the force required in 2004 to go head to head in a battle in which the ROC knows an attack is imminent. Both militaries would take tremendous

losses, but the PRC would not have much left with which to project power over the Taiwan Strait at the conclusion of such a conflict. With the primary goal of subjugation in mind, the PLA's objective is the destruction of the ROC military with as little loss to the PLA as possible.

The US Navy and Air Force could provide tremendous assistance to the ROC military in such an attack, but the ROC military would still need to provide the bulk of the effort with its air force and navy. If the ROC Air Force cannot fly or the PLAAF neutralized the ROC Navy, the PRC may be able to force a reunification. The presence of US carriers might encourage the PLAAF to stop its strikes against Taiwan since the PLAAF aircraft would be at a serious disadvantage against the US carrier aircraft. However, the carriers could not stop the PLA missile attacks. As in the previous scenario, the US Aegis platforms could stop incoming cruise missiles, but probably not ballistic missiles. This is a dangerous course of action for the PRC to pursue. Too many variables would have to come together perfectly in order to surprise the ROC and the US. Without this surprise, the PRC would waste missiles and the more expensive and hard to replace aircraft in a conflict they could not win.

PRC Course of Action Four: PRC Missile, Air, and Amphibious Attack

This course of action combines the previous course of action with an amphibious assault on Taiwan. Of the four courses of action, this scenario would be the most difficult to successfully accomplish. As in the previous courses of action, the achievement of

surprise is necessary for this to work. Without surprise, the destruction of the PLAN forces on the amphibious craft by the ROC military is a foregone conclusion.

The missile and air attacks must be coordinated to destroy the ROC Navy and destroy the ROC Air Force's airfields and landing strips to keep it out of the air. Even then, an amphibious assault on Taiwan would still be difficult to successfully achieve. The ROC Army has prepared for such an event and with its long range-artillery, attack helicopters, and tanks, could keep the PLAN force from even landing in mass.

Taiwan is not conducive to amphibious assaults. The best beaches for an assault are on the eastern side of Taiwan. The western side of Taiwan does not offer many suitable landing sites. The few sites that are easily accessible to the PLAN would not be easy to approach due to the ROC's in-depth defenses already in place. However, an amphibious assault is easier to accomplish if the landing site is already in the hands of the invasion force. The site easiest to take from inside Taiwan decides where the invasion force will land. This could be a port or a business concern. For an amphibious assault to have a chance, the PRC would have to use Special Forces (SF) and infiltrators or agents to take control of the landing site well before the amphibious force arrived. In coordination with the initial missile and air attacks, those PRC forces smuggled into Taiwan would secure the targeted landing site. ROC forces would probably not expect an attack from inside Taiwan, but from the ocean or air.

If the SF could take the amphibious landing site and the PLAAF has some semblance of air superiority, the PRC would quickly move some rapid reaction units into the area using its large Russian-made Il-76 transport aircraft. Currently, the PRC has ten

of these planes. For this scenario, in 2004 the PLAAF will have twenty of these aircraft. These planes can each move 150 fully equipped paratroopers, and with 20 planes, that is 3,000 troops per airdrop. However, even with surprise on the PLA side, it is probable the ROC would shoot some of these transports down, if not during the first drop, during subsequent drops. It would be difficult for the PLA to get a full brigade into the landing site. The rapid reaction units called "fist" units are like the US's 82nd Airborne or 101st Air Assault organizations (Howard 1999, 12). In this course of action, the PLAAF would insert the fist units into the landing sites as quickly as possible. Current fist units are brigade sized and have about 6,000 personnel. The fist units, along with the SF and infiltrators, would have to hold off the ROC Army while the PLAN moves forces from the mainland to the landing sites, or the landings would not be successful.

Another key to making the landing successful will be the ability of the PLAN to move heavy weapons and equipment to Taiwan as quickly as possible. Without those weapons, the ROC Army will quickly overpower the PLA forces. In addition, PLAAF air superiority is required for this plan to succeed. If the ROC Air Force can still fly and successfully challenge the PLAAF, the PLAN amphibious assault does not stand a chance, let alone the Il-76 transports dropping the fist units into Taiwan.

The PLAN is not equipped at present to conduct a large-scale amphibious assault on Taiwan. Table 3 in chapter 3 lists the current amphibious ships and craft the PLAN possesses. What it does not portray is how many of those craft are not operational or their ages. The SHAN class LSTs are actually old US ships built between 1942 and 1945 and given to the Nationalists before they fled the Mainland for Taiwan (*Jane's Fighting*

Ships 1998, 134). As 230 of the 342 vessels are Reserve ships, it is possible not all of those will be able to function in an invasion force. In 2004, the PLAN will not have gained any additional lift capacity. Their new construction only kept pace with the decommissioning of the older vessels.

For this scenario, the PLAN amphibious vessels will move between 20,000 and 40,000 troops with their equipment in the first wave. More importantly, the limited lift capabilities of the amphibious ships limits the PLAN's ability to conduct major opposed landings (Howard 1999, 11).

The major problem the PLAN will have in this scenario, which is one of the reasons it is considered the least likely, is the time it would take to coordinate the movement and loading of all of the amphibious vessels. This is why the PLAN would not rehearse the assault. The PLAN would not load the amphibious craft with personnel until the evening before the assault. The ships could have had the equipment loaded under the cover of darkness in different ports a few weeks beforehand. Otherwise, if the PLAN loaded all the vessels at the same time, the US intelligence services would correctly deduce the PLAN was planning an amphibious operation. Either way, this is the hardest part of the plan to keep a secret. The majority of the troops would arrive on the Yunnan class amphibious craft, which can only go twelve nautical miles per hour. This would mean the invasion force would probably take anywhere from six to ten hours in transit to the landing site on Taiwan. Since the lift capability of the PLAN will not move enough troops to Taiwan in the first wave, those ships would have to turn around and go pick more troops up for delivery to Taiwan, a slow process.

US Navy Response to Course of Action Four: PRC Missile, Air, and Amphibious Attack

The US Navy arrival timeline, if the ROC military had warning of the attack, would not be critical to the success of the ROC defense of Taiwan. Even if PRC effectively neutralized the ROC Air Force and Navy, the PLAN could not move the 800,000 to 1,000,000 personnel required for an invasion to be successful (*Jane's Sentinel Security Assessment: China and Northeast Asia* 1999, 517). The ROC Army would probably defeat the PRC Fist units, SF, and infiltrators before the amphibious forces could arrive. As small as Taiwan is, there is no landing site so far from ROC Army troops to be defensible by the PLA for a long period without proper reinforcements. There are too many critical components of this attack the PRC must coordinate successfully for this course of action to succeed.

With surprise on its side, if the PRC achieved the goal of destroying the ROC Navy and neutralizing the ROC Air Force, the US carrier battle groups would transit to Taiwan as quickly as possible. The time frames in the previous course of action are applicable here. The primary goal would be to keep the invasion force from landing. Because of the time constraints placed upon the US Navy, unless a carrier was already off the coast of Taiwan, it does not appear US carriers will play a part in an attempted amphibious invasion.

If the PRC succeeded in its initial attacks and actually landed the first wave or two of an amphibious assault force, the US Air Force would assist the navy. Long-range

bombers could fly from the US and Guam with air-launched antiship cruise missiles to destroy the PLAN amphibious vessels as they try to resupply the landing site. Those same bombers could bomb the landing site. Air force fighter aircraft could assist the US carrier aircraft, once a carrier arrived in the area, in the fight against the PLAAF. Key to the air force fighters assisting Taiwan would be Japanese permission to fly out of bases in Japan. Without this permission, the closest air force base the fighter aircraft could fly from would be in Guam. It would also increase the difficulty for the US Navy in providing timely aid to Taiwan if the US Navy bases were not available. If the US Navy found itself supporting a MTW somewhere else, the difficulty of providing carriers would increase substantially.

This course of action, if the PRC is successful, forces the US Navy to attack PRC forces to protect Taiwan. The US would use smart weapons against PLAN naval vessels, antiair sites, and heavy weapons already deployed to Taiwan. The US would wage ASUW and AAW against the PLAN and the PLAAF. Balanced with protecting Taiwan by destroying the forces already landed would be protecting the carrier battle group from PLAAF long-range bombers. To increase force protection, additional Aegis assets would augment the carrier battle groups.

The PLAAF aircraft, in order to launch its own missiles at US Navy vessels, must enter within range of US Navy weapons systems. This almost guarantees the PLAAF aircraft will not be capable of successfully attacking the carriers and their support ships. However, if the PRC saw an advantage in sending wave after wave of older aircraft after the carriers, the US might soon run short of missiles. A weakness to this plan is most of

the PLAAF aircraft taking part in this raid would fly one-way missions due to their short range and the distance the carrier would be in an easterly direction from Taiwan. In addition, because of the advantage of the US detection systems, such raids would not surprise the US. The TU-22s and Su-30s would probably offer the PLAAF the best chance of successfully attacking the carriers; however, the carriers would probably be waiting for just an attack. This is why the US must have a large supply of antimissile and antiair missiles on hand. Those missiles can be on the supply ships or provided through the augmentation of additional Aegis vessels.

Conclusion to Course of Action Four: PRC Missile, Air, and Amphibious Attack

In this course of action, audacity may actually be the key to success. The PLAN could not possibly keep this a surprise. The greater surprise would be the willingness of the PRC to go through with this attack. By doing the unexpected and what everybody would consider foolish, the PRC might actually pull some of the attack off successfully. Surprise and boldness are the keys to this course of action. Without it, the PRC will be doomed to failure. Even with surprise, the PRC would probably not succeed. In this course of action, the PRC stands to lose much of its Air Force, Navy, and a bulk of its missile inventory. Of the four courses of action identified, this is the least probable scenario and the most dangerous. If the PLAAF cannot neutralize the ROC Air Force, the PRC forces on Taiwan do not stand a chance. The PLAAF transports would fail in their drops. The PLAN amphibious ships would have nowhere to land. The US Navy has more than enough force to stop an invasion force, even if the PRC was successful in

its initial missile and air attacks. However, the US Navy would need to ensure an adequate supply of advanced munitions in order to continue to attack PRC forces while protecting the carriers.

Conclusion

The PRC cannot take Taiwan today or in 2004. The PRC military would be incapable of defeating the US Navy or the ROC military in battle. The PLAAF and PLAN do not have the right mix or quantity of quality advanced weapons platforms to challenge the ROC for control of the air or sea routes from the Mainland to Taiwan. In all of the courses of action, surprise was a necessary element. The PLAN still has many years of development in front of it in order for it to be considered a quality blue water navy, able to compete on the world scene with other major powers. A good blue-water navy may allow it to hold off the US Navy while attacking Taiwan with other forces. The PLAAF, with the infusion of the Russian aircraft, does not automatically become a superb force. Training, maintenance, and logistic issues all need to be worked out in concert to allow the PLAAF pilots the opportunity to push their new jets and weapons systems to the limits of the pilots and aircraft.

The purchase of four Kilo submarines and two Soveremenny DDGs does not immediately give the PRC the edge it is looking for. Both Russian platforms are potent, but they do not give the PLAN any depth or redundancy in a fight. In addition, the receipt of these advanced platforms does not mean the PLAN will utilize the systems to their full advantage. The PLAN crews on the Kilos had problems after taking delivery of the submarines. Until the PLAN can fully complete all maintenance requirements

successfully, whether the maintenance is depot level or just the crew's daily maintenance requirements, the PLAN will treat the platforms gingerly and not learn how to take advantage of the new capabilities the new platforms bring. This is very similar to how the PLAAF currently treats the Su-27.

If the PLAN remains dependent on parts to arrive from Russia for maintenance issues, deployments may be limited in order for the ship to remain ready for a conflict. This catch-22 places the crews in a bad position. They cannot get under way for quality training because something on the ships might break. Yet, if they get underway and something does break, they may not be able to fix it and would then be forced to keep the ship in port until the part, and maybe technicians, arrive from Russia to fix the craft. What also compounds the problem is that the lack of technical experts in the PLAN would increase the time it takes to determine what really broke.

The PLAAF suffers severe maintenance, logistics, and training deficiencies that keep it from achieving the same levels of excellence of advanced western militaries. The PLAAF is only able to perform minor maintenance on the Su-27s. For major maintenance issues, the aircraft must go back to Russia. As a result, pilots cannot stress the aircraft while flying them. Thus, pilots do not push their high performance aircraft to the limit to learn how to take advantage of the aircraft's advanced capabilities. Based on comments from some of the PLAAF pilots, the Russians may not have transferred some of the more advanced technologies, such as air search radars, to the Chinese with the Su-27s (Lilley and Downs 1997, 232).

The PLAAF has, as introduced in a previous chapter, a tremendous numerical advantage over the ROC Air Force. However, being able to fly only one sortie every four days levels the playing field considerably. Most PLAAF aircraft represent 1950's and 1960's technology. The ROC Air Force, although much smaller, is highly advanced and its pilots are trained to Western standards. In a battle, the advantage goes to the ROC Air Force.

Without the PLAAF and the PLAN to aid the PLA, a forcible entry option is not feasible. The PLA, despite its huge army, is not able to use its numbers to its advantage. The Taiwan Strait acts as a moat did around a castle. Before an army could attack the occupants of a castle, they first had to cross the moat and breach the castle walls. The massive PLA could defeat the ROC Army in pitched battle because of its tremendous numerical advantage. However, without the ability to get to Taiwan, and then force its way onto the island successfully, the PLA is impotent in this fight.

The PRC's capabilities in 2004 will not have changed significantly. Some new weapons platforms and systems will have increased the PLAN and PLAAF arsenals, but the ROC military will not have remained static. It also bought new systems while increasing the capabilities of its older systems. Until the PRC spends enough money and energy in building its own defense industry to match Western industries, it will not catch up with the West. As long as China has to buy its new equipment from other nations, its training and knowledge levels will suffer. It does have pockets of excellence, like its missile section. However, in order to be able to project military power, it needs more than pockets of excellence.

Until the PRC is able to bring to bear massive attacks, by the PLAAF, PLAN, and the SA, sustain those attacks for a lengthy period of time, and gain air superiority over Taiwan, the PRC will not defeat the ROC and force reunification through military means. The US Navy can sit east of Taiwan well out of the range of most of the PLAN and PLAAF weapon systems and provide an effective defense to Taiwan. This does not require the US to attack sites on the Mainland. As long as the US maintains the ability to reach out and touch somebody first and with the greater range, it should be able to defend Taiwan for many years to come.

China's economic policies dictate its military expenditures and therefore the pace of modernization. Because the PRC leadership has given a higher priority to developing its economy than it has to building a strong military, the military will not catch up with the West in the next few years. However, as the Chinese economy picks up greater speed, as more advanced commercial industries are developed that have military applications, the military will find itself in the good position of having the indigenous capability to produce military hardware that is on par with Western equipment. This will take years to accomplish, but it is possible that within the next twenty to forty years, the PRC could catch up with the more advanced Western nations in military might and technology, at least to the point where the PRC could threaten Taiwan with military force and succeed in applying that force.

There are other issues not covered by this thesis that are important to future crises in the Taiwan Strait. The US has thousands of citizens in Taiwan. If a major crisis broke out, would the US conduct noncombatant evacuation operations (NEO) of the US

citizens? Would Marines deployed on an Amphibious Readiness Group (ARG) provide some of the assistance? How would the PRC react to US combat troops in Taiwan, presumably to protect and evacuate US citizens? How would Japan react to a major military confrontation between Taiwan and the PRC? The US has been pushing the Japanese government to increase its military expenditures and build its force structure to a greater level. Would the US want Japan to participate in the defense of Taiwan? Would the Japanese support the Taiwanese people? To the Taiwanese, the Japanese occupation was not a bad era, but a time where Japan brought many advances to a backwards culture. They did not perceive the Japanese in the same negative light as the Mainlanders did after World War II.

Future issues which could not be addressed sufficiently in this paper include the continued arms sales to Taiwan and the PRC, TBMD in Japan and Taiwan, a resurgent Russia with relations turning sour between Russia and China, reunification between North and South Korea, and a remilitarized Japan. Any of those issues could change future engagements, both political and military, between the PRC and Taiwan. If the US and Japan are able to successfully build and deploy a TBMD system, which could also cover Taiwan, this would place the PRC in the bad position of having to build a greater quantity of missiles to try to overcome the system. The same applies if Taiwan can build its own TBMD system.

If Russia's relationship with China turns sour and Russia stops arms sales to China, what country will be the new supplier of arms to China? One of the reasons China has bought arms from Russia is the price difference between Russian-made and Western-

made arms. China cannot afford to buy the same number of weapons platforms from Western countries. In addition, bad Sino-Russian relations would force China to once again focus on its borders with Russia, something it does not currently have to do.

If the Koreas reunify under a government similar to South Koreas today, will this threaten China? If Japan perceives the US will not keep its military commitments in Asia and it remilitarizes, will it take Taiwan under its protection? How will the PRC perceive a stronger and more aggressive Japan?

If any of these future issues actually occurs, they would change substantially PRC plans for a forcible reunification of Taiwan. China fears a resurgent Japan. China appreciates the closer relationship it has developed with Russia. China has enjoyed a growing economic relationship with South Korea while it continues to carefully give only enough aid to North Korea to avert an implosion of the government. China does not want to see TBMD deployed in Japan, whether it covers Taiwan or not. TBMD deployment would force the PRC to spend even more money to develop systems to overcome a it.

Today, the PRC cannot defeat the Taiwanese military to force a reunification of Taiwan. In 2004, if the world situation does not change in a drastic way, the PRC will still not be able to defeat the ROC military in a battle without the tremendous advantage of complete surprise, an unlikely event. Since it is unlikely the PRC could accomplish a surprise attack, with the exception of course of action two, a limited attack using missiles only, the PRC will probably not attack Taiwan in the near future. Course of action two provides the PRC with the only plausible course of action, which might achieve the long-term goal of reunification with Taiwan. Coercive diplomacy, used in conjunction with a

missile attack, may force Taiwan to negotiate reunification with the Mainland, if only to keep from being attacked by missiles again. The PRC, in both the short and long term, does not have the necessary military capabilities to use the other three possible courses of action with successful results. If the US Navy maintains its edge in standoff capabilities, it will be able to help Taiwan in any future conflict the PRC decides to pursue. This paper provides some analysis that the PRC must make significant changes to its military and industrial infrastructure before it can challenge Taiwan, let alone the US, in a military conflict over Taiwan.

REFERENCE LIST

Ahrari, Dr. Ehsan. 1998. China's naval forces look to extend their blue water reach. *Jane's Intelligence Review* 10, no. 4 (April): 31-36.

Bernstein, Richard, and Ross H. Munro. 1998. *The coming conflict with China.* New York, NY: Vintage Press.

Bodansky, Yossef. 1999. Beijing and the Kosovo Crisis: Learning From the Nato War Against Yugoslavia, the PRC Polishes the Skills Needed to Fight Asymmetrical Wars. *Defense & Foreign Affairs: Strategic Policy* 27, no. 5-6 (28 June): 4-12.

Borik, Frank C., CDR, USN. 1995. Sub Tzu & the art of submarine warfare. *Naval Institute Proceedings*, (March) 64-72.

Clark, Cal. *The 2000 Taiwan presidential elections.* AsiaSociety.org Digest. March2000. Available from www.asiasociety.org/publications/taiwan_ elections.html#chinarel. Internet. Accessed 7 April 2000.

Deutsche Welle radio: English: News & Current Affairs. Interview with Lee Teng-hui,President of the Republic of China (Taiwan). Available from www.dwelle.de/english/interview.html. Internet. Accessed 6 September 1999.

Dong Feng/Julang series missiles. Softwar. Available from www.softwar.net/dongfeng. html. Internet. Accessed 19 March 2000.

Eckholm, Erik. China denies it bought Israeli radar. *New York Times*, 17 November1999. Available from ebird.dtic.mil/Nov1999/e199991117china.html. Internet.

Fisher, Richard D. 1999. *China increases its missile forces while opposing U.S. missile defense.* The Heritage Foundation, 7 April, ASC Backgrounder No. 1268. Available from www.heritage.org/library/backgrounder/bg1268.html. Internet. Accessed 4 April 2000.

Dangerous Moves: Russia's sale of missile destroyers to China. The Heritage Foundation: 20 February 1997, ASC Backgrounder No. 146. Available from www.heritage.org/library/categories/forpol/asc146.html. Internet. Accessed 19 March 2000.

Garver, John W. 1997. *Face-off: China, the United States, and Taiwan's democratization.* Seattle: University of Washington Press.

Gawrych, George W., Dr. 1996. *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*. Leavenworth Papers, No. 21. Combat Studies Institute, U.S. Army Command and General Staff College. Leavenworth, KS.

Gertz, Bill. China targets Taiwan with 2nd missile base. *The Washington Times*, 8 December 1999: 1.

Gittings, John. 1974. *The World and China, 1922–1972*. New York: Harper & Row, Publishers.

Harris, Jerry D., Jr. 1998. Chinese defense modernization and the defense of Taiwan: Implications for the USAF. Thesis, Air University, Maxwell AFB, Alabama, June.

Howard, Russell D. 1999. *The Chinese People's Liberation Army: "Short arms and slow legs."* INSS Occasional Paper 28, Regional Security Series. USAF Institute for Strategic Studies, USAF Academy, Colorado, September.

Hugar, Wayne R., LCDR, USN. 1999. How far will the dragon swim? *Naval Institute Proceedings*, March, 48-51.

Hutzler, Charles. 1999. China won't use nukes vs. Taiwan. Associated Press, Beijing. 2 September, 1.

Jane's Fighting Ships, 1998-1999. 1998. Surrey, UK: Jane's Information Group Limited, Biddles Ltd.

Jane's SENTINEL security assessment: China and Northeast Asia. 1999. Surrey, UK: Jane's Information Group Limited, Sentinel House.

Kennedy, William V., Colonel, USA, Retired. 1996. We must support independence. *Naval Institute Proceedings*, November 1996, 61–63.

Lilley, James R., and Chuck Downs. 1997. *Crisis in the Taiwan Strait*. Washington, D.C.: National Defense University.

Lodmell, Joseph, CDR, USN. 1996. It only takes one. *Naval Institute Proceedings*, December, 30-33.

Madsen, Kaj Toft, CDR, Royal Danish Navy. 1996. Fighting the beast. *Naval InstituteProceedings*, August 1996, 28-30.

Marghella, Pietro, LCDR, MSC, USN. 1999. The second silent attack on Pearl. *Naval Institute Proceedings*, May, 60-65.

Nolt, James H. 2000. The China-Taiwan military balance. Taiwan Security Research. Available from taiwansecurity.org/IS/IS-012000-Nolt.html. Internet. Accessed 24 January 2000.

Periscope. U.S. Naval Institute Database. Available from www.usni.com/demo/nations/asia/taiwan/navy/. Internet. Accessed 3 April 2000.

U.S. Congress. Public Law 96-8 96th Congress, 10 April 1979.

Regional Defense Forces. *Asia-Pacific Defense Reporter*, 1999 Annual Reference Edition 25, no. 1 (1999): 59-61 and 85-86.

Ren, Yue. 1997. China's dilemma in cross-strait crisis management. *Asian Affairs, An American Review* 24, no. 3. (fall) 131-151.

Slavin, Barbara, and Steven Komarow. 1999. China's military upgrade may raise stakes in Taiwan." *USA Today*, (19 November): 16.

Smith, Charles. U.S. eyes China first-strike threat. Available from www.worldnetdaily.com/bluesky_exnews/19991111_xex_us_eyes_chin.shtml. Internet. Accessed 11 November 1999.

Stokes, Mark A., MAJ, USA. 1999. China's strategic modernization: Implications for the United States. Strategic Studies Institute, U.S. Army War College, Carlisle, PA, September.

Stratfor.com. China cautions U.S. not to interfere. Data on-line available from www.stratfor.com/asia/specialreports/special55.htm. Internet. Accessed 6 September 1999.

Stratfor.com. The Joint U.S.-China Communique. Data on line. Available from www.stratfor.com/asia/countries/china/jointuschinecomm.htm. Accessed 6 September 1999.

Taiwan's President-elect holds first meeting on China issue. Yahoo! News, Singapore. 3 April 2000. Downloaded 7 April 2000 from: sg.dailynews.yahoo.com/headlines/asia/article..../Taiwan_s_president-elect_holds_first_meeting_on_China_issues.html. Interviews. Accessed 1 April 2000

The changing face of china. 1999. *Janes Defense Weekly*, 16 December, 20-27.U.S. tries to halt Israel-China deals. United Press International. Data on lineat

www.vny.com/cf/News/upidetail.cfm?QID=130430. Date retrieved 11 November 1999.

Wortzel, Larry M. 1998. *China's military potential.* Strategic Studies Institute, U.S. Army War College, Carlisle, PA, 2 October.

1999. *The Chinese armed forces in the 21st century.* Strategic Studies Institute, U.S. Army War College, Carlisle, PA, December.

Yu, Bin. Coping with the post Kosovo fallout. *Comparative Connections*: *An E-Journal on East Asian Bilateral Relations*. Downloaded 7 April 2000 from: http://www.csis.org/pacfor/cc/993Qchina-rus.html

Yu, Peter Kien-hong. 1996. *The Chinese PLA's perception of an invasion of Taiwan.* New York, NY: Contemporary US-Asia Research Institute.

Yuanchao, Li. 1992. The politics of artillery shelling: A study of the Taiwan Strait Crises. *Beijing Review* 35, no. 36. 7-13 September: 32-38.

INITIAL DISTRIBUTION LIST

Combined Arms Research Library
U.S. Army Command and General Staff College
250 Gibbon Ave.
Fort Leavenworth, KS 66027-2314

Defense Technical Information Center/OCA
8725 John J. Kingman Rd., Suite 944
Fort Belvoir, VA 22060-6218

Naval War College Library
Hewitt Hall
U.S. Navy War College
Newport, RI 02841-5010

LCOL Richard Coon
Department of Joint Military Operations
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

Geoff Babb
Department of Joint Military Operations
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

Dr. Bjorge
Department of Military History
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352