A TALE OF ONE CHINA:
HOW AND WHY HAS THE EFFICACY OF UNITED STATES ARMS SALES
TO TAIWAN CHANGED SINCE 1990?

BY

LIEUTENANT COLONEL CHRISTIAN OGROSKY

A THESIS PRESENTED TO THE FACULTY OF
THE SCHOOL OF ADVANCED AIR AND SPACE STUDIES
FOR COMPLETION OF GRADUATION REQUIREMENTS

SCHOOL OF ADVANCED AIR AND SPACE STUDIES
AIR UNIVERSITY
MAXWELL AIR FORCE BASE, ALABAMA
MAY 2016

DISTRIBUTION A. Approved for public release: distribution unlimited
APPROVAL

The undersigned certify that this thesis meets master’s-level standards of research, argumentation, and expression.

_______________________________________________
Mark J. Conversino, Ph.D.   Date

_______________________________________________
Col Timothy M. Cullen, Ph.D.   Date
DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.
ABOUT THE AUTHOR

Lieutenant Colonel Christian Ogrosky is a 2000 graduate of the US Air Force Academy, where he double-majored in Mathematical Science and Physics. During his 16-year career he has served as an F-15E Instructor Pilot, Olmsted Scholar at Tsinghua University, Beijing, and China Regional Affairs Strategist. His most recent assignment was as the Air Force Programs Officer, Security Cooperation Office, American Institute in Taiwan, Taipei, Taiwan.
ACKNOWLEDGMENTS

I wish to thank my wife for her understanding, support, and for forgoing other activities to allow me the time to research and write this thesis. Additionally, she provided unique insight into both Taiwanese and mainland Chinese society and assisted in the search for and review of Chinese language materials. I wish to thank my parents for their review of the drafts of this thesis. I am also greatly indebted to Colonel Timothy Cullen, Ph.D., and Dr. Mark Conversino, for their guidance and mentorship, not only on this thesis, but also over the course of my entire year at SAASS.

Finally, I wish to thank the many friends and acquaintances on both sides of the Taiwan Strait, who have patiently entertained my questions, gently corrected my Mandarin, and introduced me to an entirely new and different culture and worldview. May the people on both sides of the Strait find the wisdom to resolve their political differences peacefully, and one day both be able to enjoy the fruits of liberalism and pluralism.
This study analyzes the changes in United States security assistance to Taiwan from 1990 to 2016. The author evaluates congressional notifications of major arms sales to Taiwan in terms of their impact on US-People’s Republic of China (PRC) relations and on Taiwan’s defensive capabilities. These two variables correlate directly to United States China policy goals, which strive to balance positive relations with the PRC with preventing unilateral changes to the status quo across the Taiwan Strait. By analyzing seven major arms sales notifications, the study determines that both the quantity and quality of US security assistance to Taiwan have declined in recent years. The report traces these declines to decreased US leverage over the PRC on trade and technology transfers, increased PRC economic and military power, and the impact of two American security assistance policy changes. Finally, the study proposes recommendations for future security assistance to Taiwan and a more transactional approach to US-PRC relations.
## CONTENTS

**Chapter** | **Page**  
--- | ---  
DISCLAIMER | ii  
ABOUT THE AUTHOR | iii  
ACKNOWLEDGMENTS | iv  
ABSTRACT | v  
1 PROBLEM STATEMENT | 1  
2 BACKGROUND | 10  
3 CASE STUDIES | 44  
4 ANALYSIS AND IMPLICATIONS | 65  
5 CONCLUSIONS | 83  
APPENDIX A – US ARMS SALES TO TAIWAN | 90  
APPENDIX B – US ARMS SALES TO TAIWAN PER ANNUM | 93  
BIBLIOGRAPHY | 94  

### Illustrations

#### Table

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taiwan and PRC Defense Spending</td>
<td>29</td>
</tr>
</tbody>
</table>

#### Figure

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Map of the Asia-Pacific Region</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Concern about Territorial Disputes with China</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Map of the First and Second Island Chains</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Map of South China Sea Territorial Claims</td>
<td>23</td>
</tr>
</tbody>
</table>
Problem Statement

The United States’ China policy attempts to balance positive relations with the People’s Republic of China (PRC), with opposition to any unilateral changes to the cross-Strait status quo, specifically PRC attempts to coerce or invade Taiwan or a formal Taiwanese declaration of independence. Although these goals sometimes appear to be at cross purposes, they allow the United States to support its regional allies and preserve peace and stability in the Western Pacific, while also encouraging the PRC’s transformation into a responsible regional and global stakeholder.

Despite severing diplomatic relations with Taiwan in 1979, the United States has sold tens of billions of dollars worth of arms to the island under the auspices of the Taiwan Relations Act (TRA). The US conducts these sales in order to foster greater confidence on the part of Taiwan in its dealings with the mainland and to complicate any PRC efforts to use force against Taiwan.\(^1\) More recently, however, the type, nature, and frequency of these sales appear to have changed, as have PRC responses. In the 12 years from 1990 until the end of 2001, the United States Department of Defense (DoD) notified Congress of 59 major arms sales, or almost 5 notifications per year.\(^2\) In the 15 years from 2002 until 2016, DoD notified Congress of 37 major arms sales to Taiwan, or fewer than 2.5 notifications per year, half the previous rate.\(^3\) During the same time as the rate of major arms sale notifications to Taiwan decreased sharply, the military balance across the Taiwan Strait shifted dramatically

---

2 Kan, *Taiwan: Major U.S. Arms Sales*, 56.
3 Kan, *Taiwan: Major U.S. Arms Sales*, 58.
in favor of the PRC. How then, and why, have American arms sales to Taiwan changed since 1990?

**Security Assistance**

Security assistance has long been an important component of United States foreign policy. According to the Defense Security Cooperation Agency, the United States transfers “defense articles and services in furtherance of national security and foreign policy objectives.” By increasing the military capabilities of foreign allies and partners, the United States attempts to foster regional stability, enable partners to employ forces more effectively when necessary, and allow more efficient deconfliction and integration of American and local nation forces when required. Security assistance also benefits the United States by developing new technologies for use by the American military, helping share research, development and production costs and risks, decreasing per-unit costs for DoD purchases, and increasing sales volumes for American industry.

Although the United States did not enter the Second World War until 8 December 1941, it provided large amounts of military assistance to the United Kingdom (U.K.) under the 1940 Destroyers for Bases agreement and to the U.K. and other allied nations under the subsequent Lend-Lease policy. Currently, the United States conducts security cooperation efforts with 148 countries.4

Beginning in 1950, the United States provided Taiwan $1.5 billion in economic aid and $2.4 billion in security assistance under the auspices of the Foreign Assistance Act, Mutual Security Act, and the Act for International Development (USAID). American aid ended in 1965 when

---

the United States deemed Taiwan had established a “sufficient industrial and financial base.”

Since the severance of formal diplomatic relations in 1979, the TRA has provided the legal framework to provide Taiwan with arms of a “defensive character” that do not upset the regional military balance. Determining exactly what constitutes a “defensive character,” however, is contentious, depending on the eye of the beholder and their inferences regarding the parties’ intents. Countries can use seemingly defensive systems, such as the PRC’s new Russian-built 400km-range S-400 surface-to-air missile, in an offensive manner to shoot down aircraft over another country’s territory. Conversely, nations may employ potentially offensive weapons like fighter aircraft or submarines in a defensive manner to counter an attack.

Taiwan is a major purchaser of American arms, including $20.6 billion in weaponry from 1992 to 1999, “more than any other developing nation except Saudi Arabia.” In 2011, Taiwan was the largest purchaser of US arms and defense services in the world.

Limitations of the Study

This study is limited in three key aspects. First, it is limited in geographic scope to analyzing the United States-China-Taiwan relationship. Other important actors, including Japan, the European Union, and Russia, influence events and relationships in the Asia-Pacific region but are not specifically considered in this paper.

Second, this study is limited in the period of time it analyzes. Although the PRC has always objected to the provision of security

---

assistance to Taiwan, before the establishment of relations with the United States in 1979, it did not possess the diplomatic means to protest or attempt to reduce or eliminate these sales. Following the events of 4 June 1989 in Tiananmen Square, the United States imposed sanctions and ended all security cooperation with the PRC, removing a potential reason for the PRC to not protest American arms sales to Taiwan. Therefore, this study analyzes seven major cases of arms sales from 1990 to the present in order to determine how and why American security assistance to Taiwan has changed.

Finally, this study analyzes the provision of security assistance. There are many other elements of national power that states use to influence each other’s behavior. Within security assistance, this study only analyzes weapons sales. Effective security assistance also provides training on the employment of systems, tactics, the design, management, and analysis of exercises, and military-to-military discussions of policy. These elements are equally if not more critical to military success than weapons sales, but are also less public, and therefore more difficult to research and quantify. Finally, this study is limited to major arms sales that require congressional notification, which includes major defense equipment valued at $14 million or more, defense articles or services valued at $50 million or more, and design and construction services valued at $200 million or more. Sales below these thresholds, often for spare parts or training, do not require congressional notification, occur more frequently, and do not spur the same level of protest from the PRC as do major weapon sales.

Definitions and Assumptions

This thesis considers DoD notification of major weapons sales to Congress rather than the signing of a Foreign Military Sales (FMS) Letter.

---

of Acceptance (LOA) or delivery of weapons as the date for weapons sales. The reason is two-fold. PRC objections to US arms sales to Taiwan usually focus on the congressional notification rather than any other step in the process, likely due to the political support it provides the island. The reason is two-fold. PRC objections to US arms sales to Taiwan usually focus on the congressional notification rather than any other step in the process, likely due to the political support it provides the island.9 Under the Arms Export Control Act, Section 369(b), congressional notification is the only step in the process that the US government must make public.10 Additionally, the signing of the LOA or delivery of systems often occurs several years after the notification and may be broken into numerous separate shipments. Second, the congressional notification shows the maximum dollar value authorized for transfer. Actual funds spent on a case usually do not reach this maximum value and are generally not publicly available. In several cases, such as the 2001 notification of a potential submarine sale, Taiwan never ordered or received the systems. Finally, this study does not adjust dollar amounts for inflation.

Methodology

United States China policy supposes that defensive arms sales to Taiwan increase the island’s security, allowing Taiwan to conduct cross-Strait relations from a position of confidence, leading to a more peaceful and stable Taiwan Strait and Asia-Pacific. Simultaneously, the United States desires to maintain friendly and productive relations with the PRC for short-term economic and political benefits, as well as to shape the PRC’s long-term rise, hoping to influence it to become a responsible stakeholder in the US-built post-Second World War international order.

Therefore, this study analyzes each major arms sale notification for two factors: (1) the sale’s ability to strengthen Taiwan’s defensive military capabilities, and (2) whether the sale adversely affected US-PRC relations.

---

10 Danielsson, Chinese Reactions, 8.
Although in the past Taiwan acquired weapons from other Western states, no nation besides the United States now appears willing to sell the island arms for fear of Beijing’s wrath. Following the sale of two submarines to Taiwan in 1981, the PRC downgraded relations with Holland until 1984.\textsuperscript{11} Following the 1991 sale of six Lafayette-class frigates and the 1993 sale of 60 Mirage-2000 fighters, the PRC closed the French consulate in Guangzhou and prohibited French companies from participating in several major infrastructure projects.\textsuperscript{12} In 1994, France signed an agreement pledging not to allow its companies to sell further weapons to Taiwan.\textsuperscript{13} Since this time, no country besides the United States has sold weapons to Taiwan. Therefore, Taiwan is realistically limited to either indigenous weapon development or purchase of arms from the United States. Because of these limitations, it is vital for the island’s defense that arms sales either introduce a new capability or counter one of the major threats to Taiwan’s security, or both.

For this study, a new capability is a system that Taiwan did not previously possess. Purchasing fourth generation fighter aircraft, such as F-16s, to replace third generation fighter aircraft, such as F-5s provides a new capability that improves Taiwan’s defensive capacity. Conversely, purchasing a fourth generation fighter, such as F-15s, to replace another fourth generation fighter, such as F-16s, would not improve Taiwan’s defensive strength. Alternatively, sales that provide Taiwan with key capabilities in missile defense, anti-invasion, counter-blockade, or air superiority improve Taiwan’s defenses against the most probable and most dangerous PRC threats. Therefore, even though they may not be the most cutting-edge weapons, increased quantities of these key systems still improve Taiwan’s defensive capability. The 2010 sale of 114 PAC-3

\textsuperscript{12} Lasater, \textit{Taiwan’s Security}, 38.
\textsuperscript{13} Lasater, \textit{Taiwan’s Security}, 38.
missiles improved Taiwan’s missile defenses, and therefore improved Taiwan’s defensive capability, even though the US previously notified the sale of PAC-3 missiles to Taiwan in 2008. Conversely, the 2015 notification of 36 AAV-7 amphibious assault vehicles does not improve Taiwan’s defenses, since the US previously sold 54 AAV-7s to Taiwan in 2001, and amphibious assault vehicles do not greatly improve Taiwan’s missile defense, anti-invasion, counter-blockade, or air superiority capabilities.

The PRC is now a great power with the ability to affect American interests in other fields and in other regions of the globe. Therefore, in addition to the benefit an arms sale provides to Taiwan’s self-defense, each case study analyses the notification for its impact on the health of US-PRC relations. Since its founding in 1949, the PRC has remained consistent in its stated opposition to American weapons sales to Taiwan. Because it lodges diplomatic protests and demarches American ambassadors following each arms sale notification, these protests do not, by themselves, injure long-term US-PRC relations. After some notifications, however, the PRC has taken steps to cancel high-level meetings, sever military-to-military relations, or harm American interests in other spheres. Such actions do represent at least short-term disruptions to US-PRC relations and anticipation of these responses, formal US declarations to the contrary, influence American decision-making on arms sales to Taiwan.

Case Study Selection

This thesis analyzes seven major congressional notifications from 1990 to present. The year 1990 marks the beginning of post-Tiananmen Square US-PRC relations. Prior to 1990, the United States was optimistic that Chinese economic reform might also lead to political reform, and that the PRC might become a partner for increased cooperation across a broad range of world issues. During the 1980s, the United States even conducted security cooperation programs with the PRC, including the sale
of 24 S-70 (civilian UH-60) helicopters, AN/TPQ-37 Firefinder counter-
artillery radar, MK-46 torpedoes, and an upgrade the PRC’s J-8 fighter
avionics. After the massacre of 4 June 1989, however, the United States
suspended military-to-military contacts and arms sales and combined
with the after effects of the collapse of the Soviet Union increasingly
viewed China as a competitor, if not a potential adversary.

The seven case studies analyze years with large notifications, all
exceeding $1 billion and generally represent the character of all sales
between 1990 and 2016. Additionally, these seven sales include all four
of the most recent notifications since 2008, when it appears that US and
PRC behavior have changed most.

Inferences and Preliminary Conclusions

Recent American weapon sales to Taiwan are fewer in number and
are bundled together into fewer packages than in the past. During the 12
years from 1990 to 2001, the DoD notified Congress of 59 major weapon
sales to Taiwan, an average rate of 4.92 notifications per year. In 2001,
following his Taiwan arms sale announcement, President George W. Bush
cancelled future meetings of the annual Taiwan Arms Talks. Subsequently,
from 2002 to 2016, DoD notified Congress of a total of 37
major arms sales, an average of 2.47 notifications per year, or half the
previous rate. In 2008, the United States began delaying arms sales
notifications to Congress and bundling them into large packages
announced on the same date. From 2009 to 2016, DoD has notified
Congress of 16 major arms sales in eight years, or just two notifications
per year.

During each year between 1980 and 2005, the DoD notified
Congress of at least one major arms sale to Taiwan. Beginning in 2006,
however, the DoD has failed to notify Congress of any major weapon sale
date.
In national defense, quality matters as well as quantity. While the PRC has developed and purchased new, technologically advanced systems, recent weapons sales to Taiwan do not appear to have provided the island with vastly different capabilities than those it already possessed. Because of these changes, almost all observers, including the DoD, recognize the balance of military power has swung dramatically and likely irrevocably away from Taiwan and toward the PRC.

From 1990 to 2016, the cross-Strait policies of the United States and PRC remained constant. The PRC consistently and vociferously opposes arms sales by any party to Taiwan, as it has since 1949. The United States’ unofficial relations with Taiwan remain governed by the TRA, which Congress has not modified or amended since its passage. During this period, however, the PRC’s political, economic, and military power increased greatly. Additionally, in 2001, and again in 2008, the United States modified its process for arms sales to Taiwan. Therefore, it appears that the United States’ willingness to provide security assistance to Taiwan decreased due to increasing Chinese power, a decreasing number of American tools to influence PRC decision making, and changes in the United States’ administrative processes for arms sales to Taiwan.
Chapter 2

Background

Similar to the Chinese Communist Party’s (CCP) view of Chinese history and its stated foreign policy outlook, for much of its history, the United States was an isolationist nation. Warned by its founding fathers about the dangers of foreign entanglements, the United States generally held European conflicts at arm’s length and focused instead on westward expansion and domestic development. Despite belatedly joining the Allied Powers in the First World War, the United States returned to its isolationist roots until the attack on Pearl Harbor. Increasing global interests following the Second World War finally compelled it to permanently take a position of leadership in world affairs. Many argue the PRC currently faces a similar expansion of overseas interests that are motivating it to increase its presence on the world stage, and that this shift will have major implications for regional, American, and global security.

During the Cold War, the United States acted as East Asia’s security guarantor in an attempt to stop the spread of communism. These efforts included leading the United Nations’ force to resist the North Korean attack on South Korea; supporting the government of South Vietnam; assisting Japan, South Korea, and Republic of China with their post-war reconstruction; and signing mutual defense treaties with the Philippines, Japan, South Korea, Thailand, and the Republic of China, hereafter referred to as Taiwan. The United States’ presence in East Asia provided the security essential to the region’s rapid economic growth and subsequent democratizations of South Korea and Taiwan.
Following the withdrawal of US forces from South Vietnam in 1973, some observers perceived a decline in American engagement in the Asia-Pacific region. Examples of this decline include the closure of bases in Thailand and lapsing of the Southeast Asia Collective Defense Treaty.
in 1977, severance of formal diplomatic relations with Taiwan in 1979, and the closure of Clark Air Base and Subic Bay Naval Base in 1991 and 1992 respectively. More recently, however, the United States has publicly announced its renewed focus on the region as part of President Obama’s “Rebalance to Asia and the Pacific” policy.

The Asia-Pacific region is home to just over half of humanity, and in 2014 accounted for over 40 percent of global GDP, but more than two-thirds of global GDP growth. Because of long-standing political, security, and economic interests, President Obama stated “the United States has been and always will be a Pacific nation” and that the United States’ ties with the region will be increasingly vital to American security and prosperity.

East and Southeast Asian nations, however, face a unique security and economic bifurcation. Although the United States remains the region’s preeminent military power with four treaty allies and numerous security partners, a rising PRC has replaced both the United States and Japan as the main trading partner for the majority of East and Southeast Asian countries. These nations naturally desire to benefit from trade with a growing PRC but remain apprehensive about its rapidly strengthening military, opaque intentions, willingness to employ mercantilist trade policies, and increasing assertiveness in regional territorial disputes.

The timing of the Asia-Pacific rebalance was fortuitous, as nations in the region look to the United States to increase its role and demonstrate continued interest and credibility in guaranteeing regional security. In response to increased regional tensions and uncertainty, especially with the PRC, Japan has further strengthened its already close cooperation with the United States on missile defense; begun the relocation of a politically-sensitive US base on Okinawa; joined in the purchase of F-35 aircraft; reinterpreted its constitution to allow for collective self-defense; and received assurances from President Barack Obama that any attack on the Japanese-administered Senkaku Islands would trigger an American response.4

---

4 Franz-Stefan Gady, “U.S. Approves $1.5 Billion Ballistic Missile Defense Deal with Japan,” Diplomat, 10 August 2015, http://thediplomat.com/2015/08/u-s-
South Korea overcame decades of lingering distrust from the Second World War to sign a tripartite intelligence-sharing agreement with Japan and the United States. It has repeatedly delayed acceptance of wartime command responsibilities which some fear might lead to a reduction in the United States’ role on the peninsula. Most notably, South Korea recently approved an American Terminal High Altitude Area Defense (THAAD) deployment despite strong PRC objections.

Faced with increasing PRC maritime patrols in contested portions of the South China Sea, the Philippine government recently signed a 10-year accord allowing the United States to construct military facilities in the country and expand existing training and exercises with Philippine forces. In April 2016, the United States announced that it was beginning joint patrols with the Philippines in the South China Sea and directed A-10 attack aircraft to fly patrols over the disputed Scarborough

(approves-1-5-billion-ballistic-missile-defense-deal-with-japan/)


Shoal. Even majority ethnic-Chinese Singapore, which prizes constructive relations with both the United States and the PRC, agreed in late 2015 to allow the United States to launch and recover surveillance aircraft from its air bases and station four littoral combat ships in its port by 2018.10

Perhaps most remarkable have been the warming relations between the United States and Vietnam. Despite their past conflict and normalizing of relations only 21 years ago, rising tensions in the South China Sea have helped align American and Vietnamese interests. The United States Navy now conducts regular Navy port calls and joint Coast Guard training with Vietnam, and the two governments participate in multiple Vice Ministerial or higher dialogues annually.11 Although many Americans still view Vietnam through the lens of last century’s conflict, Vietnamese are more concerned about current threats from the PRC, which has invaded Vietnam 20 times in the last 2000 years.12 A 2015 Pew Research Survey found that 78 percent of Vietnamese hold a positive view of the United States, contrasted with only 19 percent who hold a favorable view of the PRC.13

---

Although East and Southeast Asian nations ostensibly make these overtures for greater American engagement out of realist security calculations rather than an inherent affinity for the United States, their moves demonstrate the concern caused by China’s increasing strength and assertiveness, and their growing receptiveness to American engagement.

The People’s Republic of China

China views itself as the center of human civilization with a recorded history stretching back at least 3,600 years to the founding of the Shang dynasty during the Bronze Age. For the majority of its history, China has been a leading civilization in science and culture, and accounted for between one-fourth and one-third of world GDP. From 1500 to 1800, China’s economy was the largest in the world. As recently as 1820, when Europe viewed itself as the most advanced and developed continent, China’s GDP was one-fifth again as large as all of Europe and accounted for one third of global GDP.

According to the CCP’s narrative, however, from 1839 until 1949, imperialism and interference by Western powers and Japan caused China to fall from its previous and natural position as a regional hegemon. Since the founding of the PRC on October 1, 1949, the CCP has used this nationalist narrative, along with the goals of ending domestic chaos, defending territorial integrity, and more recently,

---

16 The World Bank and Development Research Center, “China 2030.”
promoting economic growth, as its pillars of legitimacy to support unopposed one-party rule.

According to most measures, the PRC has achieved great power status, including its position as a recognized nuclear state and permanent member of the United Nations Security Council, where it replaced Taiwan in 1971. Its 1.38 billion citizens comprise one-fifth of humanity. From 1980 to 2016 China’s gross domestic product (GDP) increased over 58-fold, becoming the world’s second largest economy in nominal GDP, and largest in terms of purchasing power parity (PPP).\(^{18}\) This rapid economic growth has lifted more than 800 million Chinese citizens out of poverty as well as enabled greatly increased defense spending.\(^ {19}\)

The PRC’s military budget, which the DoD estimated at $165 billion in 2015 excluding foreign weapon procurement and research and development, grew at an inflation-adjusted 9.5 percent annually from 2005 to 2014 and is now the world’s second largest, trailing only that of the United States.\(^ {20}\) This budget funds an active duty People’s Liberation Army (PLA) force of over 2.3 million, the world’s largest military, who are controlled by and loyal to the CCP, not the PRC government.\(^ {21}\) The PLA’s main role is to “ensure the Communist Party’s survival in power and then to defend China’s ‘territorial integrity,’ primarily its claim to

---


Taiwan.”22 Beginning in the 1990s, the PLA began a modernization drive to reduce its large stock of outdated equipment and replace it with fewer, more advanced systems.23 Additionally, it shifted its emphasis from land power and territorial defense to a more balanced make-up, including greater naval and air capabilities better able to project power.

The PLA Air Force (PLAAF) possesses over 2,100 fighter and bomber aircraft, 600 of which are fourth-generation or newer, and has 490 aircraft stationed within unrefueled range of Taiwan.24 The PLA Navy (PLAN) fields over 300 surface ships, including guided missile destroyers and frigates, nuclear-powered attack and ballistic missile submarines, and the LIAONING, the PLAN’s first of at least two aircraft carriers.25 The PLA’s Rocket Force, previously Second Artillery Corps, is responsible for the PRC’s nuclear and conventional missiles, including the DF-21D “carrier killer” and DF-26C “Guam killer,” as well as 1200 Short Range Ballistic Missiles (SRBMs) and 200-500 Ground-Launched Cruise Missiles (GLCMs) stationed directly across from Taiwan.26 Additionally, the PRC has taken large strides in its space and cyberspace capabilities. As part of its modernization, the PLA also recently reorganized its military regions, instituted exercises with greater realism, and increased emphasis on joint training and operations.27

---

23 Rinehart, Chinese Military, 6.
26 DoD, Annual Report to Congress 2015, 8.
Counterbalancing these many strengths, the PRC faces immense internal challenges. These include: decreasing rates of economic growth; an attempted transition from export-led growth to domestic consumption; increasing wealth disparity; a demographic imbalance with far more males than females; rapid population aging; pollution; desertification; private and government corruption; ethnic conflict in Tibet, Xinjiang, and Inner Mongolia; and protests over human and religious rights. Because of these challenges, China now spends more on internal security forces to control its own population than on the PLA.28

In light of these many advances, and to divert attention away from the challenges, in 2013 CCP General Secretary Xi Jin-Ping offered his vision of the “Chinese Dream.”29 According to this proposal, China desires a return to its central role in human civilization including increased wealth and renewed cultural influence, but also military power.

As Chinese interests have expanded in recent years, so has its development and deployment of military capabilities to enable and protect these interests. Despite long insisting that China is an internally focused nation, Chinese strategists have increasingly called for greater power-projection capabilities. The PLA’s 2015 Military Strategy states that in response to growing strategic interests, the PLA “will actively participate in both regional and international security cooperation and effectively secure China’s overseas interests.”30 Because the PRC increasingly relies upon African raw materials, Middle Eastern oil, and

its export-driven economy, the PLAN has also begun to shift its focus from “near-coast defense” to “far seas operations.”\textsuperscript{31} Since December 2008, the PLAN has conducted counter-piracy missions in the Gulf of Aden, and evacuated 35,800 Chinese nationals from Libya and 500 from Yemen.\textsuperscript{32} The PRC has also signed agreements guaranteeing it access to commercial ports in Hambantota, Sri Lanka, and Gwadar, Pakistan, as well as establishing its first foreign military base in Obock, Djibouti. Some view the establishment of these stations as a “String of Pearls” strategy to gain greater influence and control of the Indian Ocean.\textsuperscript{33}

The PLA has also increased its overseas footprint. As of 31 December 2015, the PRC had 3,045 military personnel deployed as part of United Nations peacekeeping missions, the ninth largest total and highest of any permanent Security Council member.\textsuperscript{34} CCP General Secretary Xi Jin-Ping has also pledged up to 8,000 PLA troops for a standby UN peacekeeping force which would place the PRC in the top three, if not as the largest, contributor to UN peacekeeping duties.\textsuperscript{35} Not to be left out, in 2010 the PLAAF dispatched Su-27 fighters to Turkey for joint training in the PRC’s first exercise with NATO troops.\textsuperscript{36} These deployments have allowed the PLA to gain valuable logistical and

\textsuperscript{31} PRC State Council Information Office, \textit{China’s Military Strategy}.


\textsuperscript{33} Rob Edens, “China’s Naval Plans for Djibouti: A Road, a Belt, or a Strong of Pearls?,” \textit{Diplomat}, 14 May 2015, \url{http://thediplomat.com/2015/05/chinas-naval-plans-for-djibouti-a-road-a-belt-or-a-string-of-pearls/}.


\textsuperscript{35} Michael Martina and David Brunnstrom, “China’s Xi Says to Commit 8,000 Troops for UN Peacekeeping Force,” \textit{Reuters}, 28 September 2015, \url{http://www.reuters.com/article/us-un-assembly-china-idUSKCN0RS1Z20150929}.

operational experience, because, except for the month-long border skirmish with Vietnam in 1979, the PRC has not fought a large-scale war since the end of the Korean Conflict in 1953.

Figure 3: Map of the First and Second Island Chains


To the east, the PRC has long felt penned in by what its strategists describe as the “First Island Chain”, formed by the Kuril Islands, Japanese Archipelago, Ryukyu Islands, Taiwan, Philippine Archipelago, and Borneo. In order to breach this barrier, “China is investing heavily in ‘asymmetric capabilities’ [especially missiles and submarines] designed to blunt America’s once-overwhelming capacity to project
power.” PRC control of Taiwan would allow it unencumbered access to the western Pacific.

Over the past five years, as its economic and military power have grown, the PRC has increased its activity in neighboring territorial disputes. Just a week prior to Xi Jin-Ping’s 2014 visit to Delhi, 200 PLA soldiers entered Indian-controlled territory to build a 1.2 mile-long road. In the South China Sea, PRC Coast Guard ships routinely harass Vietnamese and Philippine fishing and scientific vessels. In 2014 and again in 2016, the PRC placed the Haiyang Shiyou 981 oil rig in contested waters that Vietnam claims as part of its Exclusive Economic Zone. The PRC has conducted an enormous island-building campaign in the Spratly Island chain, creating at least 3,000 acres of land in 18 months while constructing ports and runways on these man-made islands. In February 2016, satellite images suggested that the PRC stationed HQ-9 surface-to-air missiles on Woody Island in the disputed Paracel group. Finally, despite being a signatory to the United Nations Convention on the Law of the Sea, the PRC refused to participate

in the arbitration tribunal case brought by the Philippines to delineate the PRC’s expansive and amorphous South China Sea claims.  

Figure 4: Map of South China Sea Territorial Claims


Following Japan’s nationalization of the Senkaku Islands from private ownership in 2012, the PRC instituted regular air and naval patrols inside 12 nautical miles of the islands, and in 2014 unilaterally declared an Air Defense Interception Zone (ADIZ) that overlapped with those of Japan, South Korea, and Taiwan.  

Different interpretations of Chinese territory lead the PRC to view these actions as defending its

---


territorial integrity, while other regional parties perceive greater Chinese willingness to employ its burgeoning national power to influence territorial disputes to the PRC’s advantage as aggression.

Gaining political control over Taiwan remains primary among the PRC’s objectives of sovereignty. Resolving Taiwan’s status was even one of Deng Xiao-Ping’s three great tasks for the PRC in the 1980s. Despite the fact that it has never controlled Taiwan, the CCP has made control of the island so central to its legitimacy that, if Taiwan were to announce independence and the PRC failed to respond or was unsuccessful in a military action, the CCP’s continued control of mainland China would be jeopardized. Furthermore, Taiwan’s status as an economically successful, liberal, and democratic ethnically-Chinese state 100 miles off the mainland coast provides an awkward contrast for the CCP’s authoritarian leaders.

According to the US Department of Defense, preparing for a potential invasion of Taiwan “remains the primary driver of China’s military investment” and its primary mission. Despite pledges of peaceful ties, the PRC has never renounced the use of force to bring Taiwan under its control. To codify its views and to warn then independence-leaning Taiwan President Chen Shui-Bian, in 2005 the PRC’s National People’s Congress passed an Anti-Secession Law. Article eight of the law states the PRC’s willingness to employ “non-peaceful means” against the island if “Taiwan independence forces accomplish the fact of Taiwan’s separation from China; a major event

46 DoD, Annual Report to Congress 2015, i, 6.
occurs which would lead to Taiwan’s separation from China; or if all possibility of peaceful unification is lost.” Taiwan’s Ministry of National Defense (MND) interprets “major event” to include Taiwan’s “development of nuclear weapons, the stationing of foreign troops on Taiwan, foreign forces interfering in Taiwan’s affairs, or extreme civil unrest or other internal chaos.”49 Additionally, in 2013 CCP General Secretary Xi Jinping stated that the question of Taiwan’s status “cannot be passed on from generation to generation,” raising questions about potential PRC timelines for resolution.50

**Taiwan**

Throughout history, Taiwan has sat precariously on China’s periphery, both geographically and politically. Inhabited around 8,000 years ago by Austronesian peoples, Westerners first sighted the island in 1544 and named it “Ilha Formosa”, Portuguese for beautiful island.51 Dutch soldiers constructed Fort Zeelandia in modern-day Tainan in 1624 and fended off attempts by the Spanish to establish an outpost in 1642.52 In 1662, 18 years after the founding of the Manchu-ruled Qing dynasty, Ming loyalist Koxinga, defeated the Dutch and Portuguese and established the Kingdom of Tungning on Taiwan.53 In 1683, Admiral Shi Lang captured the island for the Qing.54 The Qing dynasty, however, never fully controlled the island, administering only around 45 percent

---

52 Roy, *Taiwan A Political History*, xi.
53 Roy, *Taiwan A Political History*, xi.
54 Roy, *Taiwan A Political History*, xi.
with the remainder controlled by aboriginal tribes.\footnote{Andrew Morris, “The Taiwan Republic of 1895 and the Failure of the Qing Modernizing Project” in \textit{Memories of the Future: National Identity Issues and the Search for a New Taiwan}, (New York: M.E. Sharpe, 2002).} In 1895, as part of the Treaty of Shimonoseki ending the First Sino-Japanese War, the Qing dynasty ceded Taiwan to Japanese rule.\footnote{Text of the Treaty of Shimonoseki, \url{http://www.taiwandocuments.org/shimonoseki01.htm}.}

Taiwan came under Chinese control in 1945 after the defeat of Japan, although some independence advocates point out that the Treaty of San Francisco, signed in 1951, only stated “Japan renounces all right, title and claim to Formosa and the Pescadores,” but not to whom sovereignty should belong.\footnote{Text of the Treaty of San Francisco, \url{https://treaties.un.org/doc/Publication/UNTS/Volume%20136/volume-136-I-1832-English.pdf}.} In 1949, after losing the Chinese Civil War, Chiang Kai-Shek retreated to the island with around 2 million mainland-born followers, joining the 6 million locally-born, ethnic-Chinese and aboriginal inhabitants.

Following Chiang’s retreat, it was widely believed that Taiwan would fall quickly to the CCP. The North Korean invasion of the South in June 1950, however, stoked American fears of communist expansion, leading President Harry S. Truman to station the US Navy’s 7th Fleet in the Taiwan Strait to prevent an invasion.\footnote{Office of the Historian, \textit{The Taiwan Strait Crises: 1954-55 and 1958}, U.S. Department of State, \url{https://history.state.gov/milestones/1953-1960/taiwan-strait-crises}.} In 1954, the United States signed the Sino-American Mutual Defense Treaty, guaranteeing the island’s security and establishing the Taiwan Defense Command.\footnote{Office of the Historian, \textit{The Taiwan Strait Crises}.}

During the 1960s and early 1970s, the island served as a major logistical, repair, and rest and recuperation hub for American forces engaged in the Vietnam Conflict. In 1971, as part of UN General Assembly Resolution 2758, Taiwan lost not only its seat on the UN Security Council as China’s representative to the PRC, but also its...
Following Chiang Kai-Shek’s death in 1975, under his son’s leadership, Taiwan began to gradually liberalize, first by recognizing de facto PRC control of mainland territory, and then by ending martial law in 1987. As noted earlier, the United States severed formal relations with Taiwan on 1 January 1979 and abrogated the Sino-American Mutual Defense Treaty on 31 December 1979. In April 1979, Congress passed the Taiwan Relations Act, legislation designed to guide the United States’ continuing unofficial relations, including the provision of security assistance. Finally, Taiwan held its first democratic elections in 1996, selecting then-sitting President Lee Deng-Hui.

Taiwan remains isolated internationally with only 21 countries, mainly small Pacific, Caribbean, and Central American states, and the Vatican formally recognizing the Republic of China’s sovereignty. As a result of the PRC’s assumption of China’s seat on the UN Security Council, Taiwan has no representation at international institutions that require statehood for membership, precluding participation in organizations like the International Civil Aviation Organization and Interpol. This complicates Taiwanese efforts to engage in world affairs, sign free trade deals, and resist PRC efforts to draw the island closer into its orbit.

Taiwan experienced rapid economic growth beginning in the 1960s as one of the four so-called Asian tiger economies. Initially a center for low-cost manufacturing, Taiwan has progressively moved up the value chain and is now a hub for global high-tech design and manufacturing, including semiconductor production, a critical industry given that the PRC controls much of the world’s remaining capacity. Despite its small geographic size, Taiwan is the world’s 26th largest economy, 20th by

---

61 Roy, Taiwan A Political History, xii.
PPP, and the United States’ ninth largest trading partner, placing it just behind France and ahead of India, Italy, and Brazil. Its per capita nominal GDP of $22,000 is approximately three times that of the PRC.

While PRC military forces have always outnumbered those on Taiwan, until the mid-1990s, Taiwan enjoyed qualitative superiority in many areas. Double digit-growth in PLA budgets to fund foreign purchases as well as domestic research have helped the PRC surpass Taiwan’s technological edge. Given that the mainland’s population is 60 times larger and its defense budget close to 20 times greater than that of Taiwan, the island is now unable to directly compete with the PRC. Because of this difference in resources, and at the urging of the United States, Taiwan has attempted to adopt “innovative and asymmetric” capabilities to enhance the island’s natural defensive strength at reasonable cost.

One of these changes is Taiwan’s transition to a “volunteer force” under which the island has drastically reduced the size of its military, from 270,000 in 2012, to an end-goal of between 170,000 and 190,000 members in 2019. Taiwan reduced compulsory two-to-three-year conscription for military-aged males first to 11 months, and again to just four months beginning in 2017. Taiwan enacted this professionalization due to exceedingly low birth rates, to reduce the time spent on training recruits to operate increasingly advanced weaponry.

---

64 DoD, Annual Report to Congress 2015, 61.
and to free up workers for the civilian economy.\footnote{CIA World Fact Book, Birthrate Country Comparison, \url{https://www.cia.gov/library/publications/the-world-factbook/rankorder/2054rank.html}.} Despite pledges by President Ma to spend three percent of GDP on defense, Taiwan’s MND budget has dropped to just two percent of GDP in recent years.\footnote{Shirley Kan, \textit{Taiwan: Major U.S. Arms Sales Since 1990}, Congressional Research Service, 29 August 2014, 34. \url{https://www.fas.org/sgp/crs/weapons/RL30957.pdf}.} During the recently concluded election campaign, President-elect Tsai Ying-Wen stated her desire for greater defense spending, also promising to allocate three percent of Taiwan’s GDP to the military. Her party also plans for increased indigenous weapon production, but the feasibility of this goal and increased military spending is unknown given Taiwan’s domestic priorities.\footnote{Jennifer M. Turner, “DPP Plans to Enhance Taiwan Defense: Prospects and Cross-Strait Implications, \textit{Jamestown Foundation}, \url{http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=44973&cHash=8f92be95d5297ca78d025cd5724cdcc6#.Vwx8m2Pmt0s}.}

\begin{center}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
Fiscal Year & TW Def. Budget (NT$ bil.) & TW Def. Budget (US$ bil.) & \% TW GDP & \% Total TW Budget & PRC Def. Budget (US$ bil.) & \% PRC GDP & Ratio PRC/TW Def. Budget \\
\hline
1994 & 258.5 & 9.8 & 3.8 & 24.3 & 10.1 & 1.7 & 1.03 \\
1995 & 252.3 & 9.5 & 3.5 & 24.5 & 12.6 & 1.7 & 1.33 \\
1996 & 258.3 & 9.5 & 3.4 & 22.8 & 14.6 & 1.7 & 1.54 \\
1997 & 268.8 & 9.4 & 3.3 & 22.5 & 16.1 & 1.7 & 1.71 \\
1998 & 274.8 & 8.2 & 3.2 & 22.4 & 17.5 & 1.7 & 2.13 \\
1999 & 284.5 & 8.8 & 3.2 & 21.6 & 21.0 & 1.9 & 2.39 \\
2000 & 402.9* & 12.9* (=8.6/yr) & 2.9 & 17.4 & 22.9 & 1.9 & 2.66 \\
2001 & 269.8 & 8.0 & 2.9 & 16.5 & 27.9 & 2.1 & 3.49 \\
2002 & 260.4 & 7.5 & 2.7 & 16.4 & 32.1 & 2.2 & 4.28 \\
2003 & 257.2 & 7.6 & 2.6 & 15.5 & 35.1 & 2.1 & 4.62 \\
2004 & 261.9 & 7.8 & 2.4 & 16.7 & 40.3 & 2.1 & 5.17 \\
2005 & 258.5 & 8.0 & 2.3 & 16.1 & 45.7 & 2.1 & 5.71 \\
2006 & 252.5 & 7.8 & 2.1 & 16.1 & 55.3 & 2.0 & 7.09 \\
2007 & 304.9 & 9.2 & 2.4 & 18.7 & 68.1 & 1.9 & 7.40 \\
2008 & 341.1 & 10.5 & 2.5 & 20.2 & 86.4 & 1.9 & 8.23 \\
2009 & 318.7 & 9.6 & 2.7 & 17.6 & 105.6 & 2.1 & 11.00 \\
2010 & 297.4 & 9.3 & 2.2 & 17.3 & 115.7 & 1.9 & 12.44 \\
2011 & 294.6 & 10.2 & 2.1 & 16.5 & 138.0 & 1.9 & 13.53 \\
2012 & 317.3 & 10.6 & 2.2 & 16.4 & 157.4 & 1.9 & 14.85 \\
2013 & 312.7 & 10.5 & 2.1 & 16.4 & 177.8 & 1.9 & 16.93 \\
2014 & 311.1 & 10.4 & 2.0 & 16.2 & 199.7 & 1.9 & 19.20 \\
\hline
\end{tabular}
\end{center}

* Taiwan FY2000 covered 18 months.


\footnote{Jennifer M. Turner, “DPP Plans to Enhance Taiwan Defense: Prospects and Cross-Strait Implications, \textit{Jamestown Foundation}, \url{http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=44973&cHash=8f92be95d5297ca78d025cd5724cdcc6#.Vwx8m2Pmt0s}.}
While Taiwan’s defense budgets have decreased, the requirements for its defense dollars have multiplied. Personnel costs spiked due to the need to attract volunteers to a career in military service, which Chinese culture has traditionally held in low esteem. Political obstructionism in Taiwan’s legislature over funding arms sales authorized in 2001 meant that payments for large systems agreed to in the late 2000s and early 2010s, including Apache, PAC-3, UH-60, P-3, and the F-16 upgrade, all came due simultaneously in recent years. Furthermore, in the wake of Typhoon Morakot in 2009, President Ma directed increased military involvement in humanitarian assistance and disaster relief missions, both domestically, in events like the 2014 Kaohsiung gas explosion and 2015 Tainan earthquake, and overseas, symbolized by Taiwan’s delivery of aid to Haiti following the 2010 earthquake and to the Philippines after Typhoon Haiyan in 2013. Some opposition Democratic Progressive Party supporters also inferred a willingness to allow Taiwan’s military to atrophy as President Ma focused on increased cross-Strait engagement, with his policy stating the island’s first line of defense was improved cross-Strait ties, followed by increased international recognition and participation, with the military only receiving third billing.

The Taiwan Army is the largest of the island’s three services and occupies a plurality of general officer positions. Taiwan has increased its focus on naval and air power, however, in order to strengthen its ability to fend off potential sea and air blockades and defeat an invasion force while it is most vulnerable during a crossing of the Strait.

During the 1990s and 2000s, as the PRC continued its ballistic and cruise missile buildup across the Strait, Taiwan placed increasing

---

importance on missile defense. Beginning in 1992, the United States released missile and radar technology to Taiwan to assist with the island’s indigenous development of the Tien-Kung I, and later Tien-Kung II and III missile intercept systems, similar in design and capability to the American-built Patriot system. Taiwan also purchased 200 Patriot Advanced Capability (PAC)-2 missiles in 1993, which entered service in 1998. In 2007, the United States agreed to upgrade these three batteries to PAC-3 standard, followed by the 2008 notification of the sale of an additional seven PAC-3 batteries. In 2013, Raytheon completed construction of a “Pave Paws”-like phased array radar to increase Taiwan’s early warning of a mainland missile attack. Due to the short distances involved, missile flight times could be as short as seven minutes. Taiwan also requested Aegis-equipped ships beginning in 1992 to help counter the mainland missile threat. President George W. Bush did not, however, approve the sale of Aegis-equipped ships. This was likely due to concerns about the Taiwan military’s ability to pay for and effectively operate the complex systems, as well as PRC red lines that stated the sale of Aegis systems to Taiwan would including the island in the United States’ theater missile defense, a exceeding the bounds of the United States’ unofficial relations with Taipei. It is also possible that the United States left Aegis off as part of a carrot-and-stick approach to influence future PRC decision-making in their ongoing missile build-up.

The Taiwan Navy consists of 24 large surface combatants: six Excess Defense Article (EDA) Knox-class frigates; four Kidd-class

destroyers; eight indigenously-built Oliver Hazard Perry-class frigates; and six French-built Lafayette-class frigates.\textsuperscript{74} The oldest of Taiwan’s major combatants, the US-built FF-935 \textit{Lan Yang}, was commissioned in 1971; its newest, the PFG2-1110 \textit{Tien Dan}, was commissioned in 2004.\textsuperscript{75} In 2015, DoD notified Congress of the possible sale of two EDA Perry-class frigates, both commissioned in 1984, to Taiwan.\textsuperscript{76}

Taiwan also operates four submarines, two of which were US Navy Second World War-vintage EDA, now used for training and no longer considered dive-worthy.\textsuperscript{77} Taiwan purchased the other two Zwaardvis-class vessels from Holland in 1980 and 1981.\textsuperscript{78} Taiwan has sought US assistance to acquire additional submarines since 1982. The United States, however, commissioned its last diesel-electric submarine in 1959.\textsuperscript{79} Lack of sufficient funding, Taiwanese desires for new submarines vice retrofit vessels, a Taiwanese requirement for domestic industry participation in the construction process, as well as US Navy resistance to a program that “would not support the US submarine shipbuilding base,” delayed any action on the 2001 Bush-era submarine sale notification into the Obama Administration.\textsuperscript{80}

The Obama Administration, however, did not notify the program with other sales in 2010, stating it had not made a decision to rule the program in or out, but “NSC [National Security Council] official Jeff

\textsuperscript{75} Wikipedia, “Republic of China Navy.”
\textsuperscript{77} Wendell Minnick, “Taiwan Turning the Screws on Washington’s Sub Deal,” \textit{Defense News}, 5 December 2015, \url{http://www.defensenews.com/story/defense/naval/submarines/2015/12/05/taiwan-turning-screws-washingtons-sub-deal/76676188/}.
\textsuperscript{78} Minnick, “Taiwan Turning the Screws.”
\textsuperscript{79} Minnick, “Taiwan Turning the Screws.”
\textsuperscript{80} Kan, \textit{Taiwan: Major U.S. Arms Sales}, 11-15.
Bader stressed to the PRC ambassador that administration officials did not authorize the program at that time.”81 Some observers believe this is because submarines “were deemed to be offensive weapons unnecessary for Taiwan’s self-defense.”82 Having seen no progress toward the purchase of submarines in its Foreign Military Sales (FMS) efforts, in 2014 Taiwan initiated an indigenous submarine production program that would construct eight pressure hulls on island but seek foreign assistance for weaponry and sensor systems.83

In 2010, the Obama Administration notified Congress of the sale of two EDA Osprey-class mine sweepers that arrived in Taiwan in 2012.84 In 2014, Taiwan signed a Direct Commercial Sale contract with Lockheed Martin and the Italian firm Intermarine S.p.A. to indigenously produce an additional six mine counter-measure vessels with deliveries beginning in 2019.85

In addition to peacetime patrol and counter-invasion missions, the Taiwan Navy provides the island with critical capabilities to counter potential PRC blockades, a necessity for an island which is resource poor, only 32 percent self-sufficient in food, and highly reliant on imported fossil fuels.86

The Taiwan Air Force (TAF) operates 143 F-16A/B, 56 Mirage-2000-5EI and 5DI, and 127 F-CK-1 Indigenous Defense Fighters

81 Kan, Taiwan: Major U.S. Arms Sales, 15.
84 Assessing New U.S. Arms Sales to Taiwan, 59.
(IDF) all acquired from the mid-1990s to 2001. Taiwan completed the initial half of a domestic upgrade to its IDF fleet in 2014, including improved radars, with the remainder scheduled to finish in 2017. Despite their increased capabilities, limited internal fuel and low engine thrust still restricted the IDF’s combat potential, both the result of US Department of State restrictions during the design process to ensure the “fighter” was “defensive.” The aircraft is still derisively referred to as the “best fighter the State Department ever built.”

Although capable fourth generation fighters, Taiwan’s Mirage-2000 aircraft suffer from low readiness rates due to parts shortages and high operating cost. A massive infusion of funding increased availability from 50 to around 70 percent, but Mirage-2000 flight hours remain at least twice as expensive as F-16 flight hours, leading the TAF to consider mothballing part of its Mirage-2000 fleet.  

In 2011, DoD notified Congress of a program to upgrade Taiwan’s F-16A/B fighters between 2017 and 2022 with Advanced Electronically Scanned Array radars, AIM-9X infrared missiles, the Joint Helmet-Mounted Cueing System, improved electronic warfare pods, and precision-guided munitions. The “retrofit” aircraft will be similar to F-16C/Ds in most capabilities minus the newer model’s higher thrust engines. The upgrade will not reset the aircrafts’ service life, however, and some of Taiwan’s fighters have already flown around half of their designed 8,000-hour service life.

Taiwan also maintains approximately 60 F-5E/F that serve as fighter lead-in trainers and in an armed reconnaissance role, although these aircraft suffer from low availability due to spare part shortages, have minimal combat capability given their lack of beyond-visual-range missiles, and are scheduled to be retired in the 2018-2019 timeframe.

87 “Minister to Consider Mothballing Mirage Fleet,” *Taipei Times*, 23 October 2009,  
The TAF operates six E-2K Airborne Early Warning & Control aircraft which help to supplement ground radar stations and act as communications relays. Finally, in 2013, the TAF received the first of 12 EDA P-3C anti-submarine aircraft to replace its 1950s-era S-2T Trackers to help fill Taiwan’s maritime patrol mission.88

Despite its four fighter aircraft platforms, Taiwan faces a “fighter gap” relative to the PLAAF later this decade, as even its newest fighters will be close to 30 years old, and roughly 70 percent face retirement within 10 years.89 Beginning in 2006, Taiwan requested the release of 66 F-16C/D aircraft, submitting Letters of Request (LOR) three times in 2006 and 2007. The Department of State subsequently refused to accept all three in what the US-Taiwan Business Council termed an “unprecedented non-acceptance” of an LOR.90 Now 10 years later, the US says it is still considering Taiwan’s requirement and has not yet reached a decision on a sale. The PRC, however, “sees any sale of the F-16 fighter jets to Taiwan as a red line in its relationship with the US.”91

Some in Taiwan have already shifted focus from procuring F-16C/Ds to F-35Bs to fill TAF’s growing fighter requirement, especially given the latter’s stealth and Short Take-Off Vertical-Landing capability. This possibility, however, appears exceedingly unlikely in the short-term to medium-term given the F-35’s high unit cost, long production queues,

position as the US’s most recent and advanced fighter, and espionage risks from the mainland. Instead, even with a potential sale of 66 F-16C/Ds, operational requirements will likely force Taiwan’s existing fighter fleet to soldier on to 40, 50, or even more years of service. Taiwan’s MND has floated proposals to attempt to produce another indigenously-built fighter, but any attempt would faces steep odds, as the IDF program received substantial technical assistance from Lockheed Martin and the US would be unlikely to transfer advanced stealth, avionics, or engine technology to Taiwan.

Despite its large inventory of credible defense capabilities, Taiwan faces an adversary with an enormous resource advantage and strong political motivation to control the island. In 2013, Taiwan Defense Minister Yen Ming stated that Taiwan could counter a PRC invasion for one month; most observers, however, believe that assessment to be optimistic without third-party intervention.92

Cross-Strait Relations

The PRC and Taiwan have never signed a peace treaty to end the Chinese Civil War. Tensions between the two sides remained elevated throughout the three Taiwan Strait Crises, with the United States dispatching naval forces in each instance to help ensure the hostilities did not escalate. During the 1950s and 1960s, the United States made continued security assistance to Taiwan contingent upon guarantees that Chiang Kai-Shek would not attempt to “liberate” the mainland. In 1979, in an attempt to reduce cross-Strait barriers, the PRC proposed the “Three Links” with Taiwan of mail, transportation, and trade. Although initially rebuffed by Taiwan’s policy of “Three Noes,” a gradual thawing, especially after Taiwan’s 1987 decision to allow travel to the

mainland, facilitated slow improvement in relations as contacts increased. Uneven progress under President Lee Deng-Hui, and especially independence-minded President Chen Shui-Bian, gave way to greatly improved relations after the 2008 election of Ma Ying-Jeou on a platform of decreased cross-Strait tensions and increased contact and cooperation. Today there are direct mail, direct flights, cross-Strait tourism, and voluminous trade between the two sides. Foxconn, a Taiwanese company and the world’s largest electronics contract manufacturer, employs one million workers in the PRC. In 2014, two-way trade reached $198 billion, 3.98 million mainland tourists visited Taiwan, and around one million Taiwanese businessmen were working on the mainland.

Despite winning reelection in 2012, Ma’s promised economic benefits failed to trickle-down to everyday Taiwanese. Increasing concerns about the pace of cross-Strait developments and a sense of lack of transparency in government deliberations led to a student occupation of Taiwan’s legislature and massive street protests in 2014. President Ma’s approval ratings dropped to single digits, leading to easy victories for the opposition Democratic Progressive Party (DPP) in the “9 in 1” elections in November 2014 and the 16 January 2016 presidential poll. Much of the recent progress in cross-Strait relations achieved under President Ma appears locked-in, but the potential for further advancements is uneven, especially given DPP President-elect Tsai’s

disagreement with the PRC over the role of the PRC-Kuomintang (KMT) ‘92 Consensus as the basis for cross-Strait relations.

In a worrying development for the CCP, “polls show that the generation of islanders who identify as ‘Chinese’ is fading, and more people identify themselves as ‘Taiwanese’.”96 Public opinion polling from September 2015 found that in the near-term, 25.4 percent of the island’s residents desired immediate independence, 56.1 percent preferred a continuation of the status quo, and 7.7 percent favoring reunification with the mainland.97 When asked about their long-term preferences, 51.1 percent desired independence compared to 35.7 percent against. Finally, 21.1 percent supported eventual reunification, contrasted with 66.4 percent opposed.98

CCP General Secretary Xi’s increasing crackdown on mainland freedoms, as well as PRC interference in Hong Kong’s supposedly independent government, have strengthened Taiwanese anti-mainland views and further reduced the already low level of support for the PRC’s proposed “One Country, Two Systems” model. Across the Strait, “ Taiwanese see an increasingly repressive mainland government ... and want no part of it.”99 On the other hand, despite their desires for a reduced pace in cross-Strait developments, many young Taiwanese do not view the PRC as a military threat, resulting in decreasing support for future military spending.

US China Policy

---

96 Frisch, “How China Lost Taiwan.”
97 Of the 56.1 percent favoring a continuation of the status quo, 37.1 percent favor the status quo initially and then a decision on Taiwan’s fate at a later date; 19.0 percent desire continued long-term preservation of the status quo. Taiwanese Views on Independence and Reunification, Global Views Monthly, 24 September 2015, http://www.ettoday.net/news/20150924/569731.htm?feature=88&tab_id=94.
98 Taiwanese Views on Independence and Reunification, Global Views Monthly.
99 Frisch, “How China Lost Taiwan.”
Several important documents codify the United States’ China policies: the Taiwan Relations Act; the “Six Assurances;” and three joint United States-PRC communiqués. The United States and China released the Joint US-China Communiqué of 27 February 1972 (also known as the Shanghai Communiqué) on the second-to-last day of President Richard Nixon’s visit to China. In addition to general declarations on the advantages of each side’s system of government, the communiqué states that President Nixon and Premier Chou En-Lai held “earnest and frank discussions...on the normalization of relations.” The PRC “reaffirmed its position: The Taiwan question is the crucial question obstructing the normalization of relations between China and the United States” while the United States agreed to “progressively reduce its forces and military installations on Taiwan as the tension in the area diminishes,” the first linking of PRC threats to Taiwan with America’s provision of security assistance.

On 1 January 1979, the two countries released the “Joint Communiqué on the Establishment of Diplomatic Relations Between the United States of America and the People’s Republic of China,” normalizing relations. While “acknowledging” the Chinese position that “there is but one China and Taiwan is a part of China,” the United States also declared that it would “maintain cultural, commercial, and other unofficial relations with the people of Taiwan.”

On 10 April 1979, Congress passed the Taiwan Relations Act (TRA), Public Law 96-8, clarifying the unofficial relations between the United States and Taiwan after the severance of diplomatic relations three

---

months earlier. Section two of the TRA states the United States’ goal of “maintain[ing] peace, security, and stability in the Western Pacific” and “promot[ing] 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.” The act further states that the status of Taiwan is an international concern, the establishment of relations with the PRC rests upon the expectation that the status of Taiwan will be determined peacefully, and that the United States will provide Taiwan with arms of a defensive nature. Section 2b reads:

It is the policy of the United States—
(1) to preserve and promote the extensive, close, and friendly commercial, cultural, and other relations between the people of the United States and the people on Taiwan, as well as the people on the China mainland and all other peoples of the Western Pacific area;
(2) to declare that peace and stability in the area are in the political, security, and economic interests of the United States, and are matters of international concern;
(3) to make clear that the United States decision to establish diplomatic relations with the People’s Republic of China rests upon the expectation that the future of Taiwan will be determined by peaceful means;
(4) to consider any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States;
(5) to provide Taiwan with arms of a defensive character; and
(6) to maintain the capacity of the United States to resist any resort to force or other form of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan.

Section three of the TRA declares that “the United States will make available to Taiwan such defense articles and defense services in such

quantities as may be necessary to enable Taiwan to maintain a sufficient self-defense capability. The President and Congress shall determine the nature and quantity of such defense articles and services based solely upon their judgment of the needs of Taiwan.” Key are the specification of “arms of a defensive character,” the requirement that the executive and legislative branches cooperate to determine Taiwan’s defense requirements, and that this judgment be based solely on Taiwan’s needs and not any outside influences.

After severing diplomatic relations on 1 January 1979, the United States suspended arms sales to Taiwan for one year, but the question of future sales remained unresolved. Notifications resumed in 1980, with the United States announcing $280 million in “defensive arms sales” to the island. Displeased by what it viewed as a violation of its sovereignty, the PRC stated that continued arms sales to Taiwan would be cause for downgrading relations with the United States. In the spring of 1982, although refusing to sell the more sophisticated F-16s Taiwan desired, the United States approved the sale of additional F-5E fighters, followed by a further $60 million in spare parts. Three days later, the PRC warned the United States that relations between the two sides were at a “critical juncture.” Both sides sought a modus vivendi that would help mitigate differences on arms sales in order to allow overall US-PRC relations to advance.

104 Danielsson, Chinese Reactions, 60.
106 Danielsson, Chinese Reactions to Taiwan Arms Sales, 60.
107 Danielsson, Chinese Reactions to Taiwan Arms Sales, 60.
Final, on 17 August 1982, after 10 months of secret negotiations, the United States and PRC signed a joint communiqué regarding arms sales to Taiwan.\textsuperscript{108} Article six of the document reads:

Having in mind the foregoing statements of both sides, the United States Government states that it does not seek to carry out a long-term policy of arms sales to Taiwan, that its arms sales to Taiwan will not exceed, either in qualitative or in quantitative terms, the level of those supplied in recent years since the establishment of diplomatic relations between the United States and China, and that it intends gradually to reduce its sale of arms to Taiwan, leading, over a period of time, to a final resolution. In so stating, the United States acknowledges China’s consistent position regarding the thorough settlement of this issue.\textsuperscript{109}

Although agreeing to qualitative and quantitative limits, a gradual reduction, and a final resolution of the issue of arms sales to Taiwan, the United States managed to avoid setting a date certain for ending arms sales. Instead, and even though it is not mentioned in the 1982 communiqué, the US focused on “the correlation between reduction of arms sales to Taiwan and the People’s Republic of China’s peaceful policy toward Taiwan.”\textsuperscript{110}

The inherent tensions between the TRA and 1982 Communiqué are obvious and concerned Congress. In a statement later that year, State Department Legal Advisor Davis Robinson told Congress: “[The August 17 Communiqué] is not an international agreement and thus imposes no obligations on either party under international law. Its status under domestic law is that of a statement by the President of a policy which he intends to pursue...The Taiwan Relations Act is and will

\textsuperscript{108} Danielsson, \textit{Chinese Reactions to Taiwan Arms Sales}, 61.
\textsuperscript{110} Danielsson, \textit{Chinese Reactions to Taiwan Arms Sales}, 61.
remain the law of the land unless amended by Congress. Nothing in the joint communiqué obligates the President to act in a manner contrary to the Act or, conversely, disables him from fulfilling his responsibilities under it.”111 Although the 1982 Communiqué allowed US-PRC relations to proceed, the United States has struggled with the contradictions ever since.

During the negotiation of the 1982 Communiqué, the governing authorities on Taiwan proposed six points for the future conduct of United States-Taiwan relations. The Reagan Administration accepted the points and informed Congress of these “Six Assurances” in July 1982:

1. The United States would not set a date for termination of arms sales to Taiwan
2. The United States would not alter the terms of the Taiwan Relations Act.
3. The United States would not consult with China in advance before making decisions about U.S. arms sales to Taiwan.
4. The United States would not mediate between Taiwan and China.
5. The United States would not alter its position about the sovereignty of Taiwan which was, that the question was one to be decided peacefully by the Chinese themselves, and would not pressure Taiwan to enter into negotiations with China.
6. The United States would not formally recognize Chinese sovereignty over Taiwan.

The “Six Assurances” gave Taiwan a greater sense of security regarding its relationship with the United States, the possibility for future arms sales, as well as the freedom and confidence to negotiate cross-Strait issues with the PRC.

---

Chapter 3

Case Studies

1992 Notification

On 2 September 1992, during a trip to the General Dynamics factory in Fort Worth, President George H.W. Bush announced his decision to sell Taiwan 150 F-16 A/B aircraft.1 During 1992, DoD also notified Congress of the possible sale of four E-2T AEW aircraft; three Patriot surface-to-air missile batteries; 12 SH-2F Light Airborne Multipurpose System (LAMPS) Anti-Submarine helicopters; 207 Standard Missile (SM-1) surface-to-air missiles; Patriot-related missile and radar technology that was later incorporated into the Sky Bow missile system; and the lease of three Knox-class frigates.

The 1992 notification took place in the aftermath of the Tiananmen Square Massacre. As part of its reaction to Beijing’s violent crackdown on the protests, the United States ended all arms sales to the PRC, a prohibition that remains in place today. Taiwan had requested advanced aircraft, including the F-16 and F-20, since at least 1982 to replace its 1960s era F-5s and F-104s, which were crashing at a high rate. During the 1980s, the United States limited its sale of advanced technology to Taiwan out of fear of upsetting the cross-Strait military balance. The Russian sale of 72 Su-27 fighters to the PRC in early 1992, however, erased these concerns and provided justification for F-16 sales. Additionally, in 1992, Taiwan ordered 130 IDF fighters from its domestic Aerospace Industrial Development Corporation and was negotiating the purchase of up to 120 Mirage-2000 fighters from France. Taiwan later agreed to purchase 60 Mirage-2000 aircraft that November. These sales

allowed US industry to plead that government restrictions were denying them potentially lucrative weapons sales. This argument found traction during the summer of 1992, as President Bush faced reelection with a weak economy and loud criticism in his home state of Texas for not authorizing the F-16 sale that would create up to 10,000 jobs.²

**Taiwan Military Readiness.** The 1992 notifications introduced multiple new capabilities to the Taiwan military. The sale of 150 F-16 A/B provided Taiwan with fourth generation fighters to replace its third generation F-104Gs and F-5Es. The four E-2Ts provided Taiwan with its first airborne early warning radar, supplementing its more vulnerable fixed-location, ground-based systems. The sale of 207 SM-1 missiles added to Taiwan’s stockpile of 97 missiles notified the year prior, improving the Taiwan Navy’s air defense capabilities. The release of Patriot technology and notification of the sale of three Patriot batteries, although not acquired until 1997, gave Taiwan its first missile defense capability just as the PRC was beginning to field large numbers of ballistic and cruise missiles across the Strait. The 12 SH-2Fs provided Taiwan with its first anti-submarine helicopter. Finally, the three Knox-class frigates provided Taiwan with anti-submarine, anti-surface, and anti-air capabilities. All systems except for the SM-1 missiles were new capabilities, and all of the systems provided either anti-missile, anti-amphibious invasion, or air superiority capabilities.

**US–PRC Relations.** Despite at that point constituting the United States’ largest arms sale to Taiwan since the 1982 Joint Communiqué, the 1992 arms notification did not negatively impact US-PRC relations. Following President Bush’s 2 September announcement, the PRC denounced the arms sale by publically lodging “the strongest protest,” expressing their “extreme indignation,” and demarched US Ambassador

---

² Mann, “President to Sell F-16s to Taiwan.”
Stapleton Roy. The PRC did not, however, cancel high-level meetings, and the United States had already severed military-to-military relations, later restored in 1993, in response to the Tiananmen Square massacre. One reason for the PRC’s muted response may also have been President Bush’s decision to allow American companies to once again cooperate with the PRC on satellite launches shortly after the announcement of the Taiwan sale. “Within two weeks of the F-16 announcement – taking place in the days before the F-16 congressional notification, and perhaps intended to soften the political blow – President Bush informed Congress of his intent to lift pre-existing US restrictions on exports of satellites and related components to China, imposed in 1991. Export licenses were subsequently granted to US manufactures for six communications satellites, intended to be launched on Long March launch vehicles.” In 1992, President Bush also certified the PRC’s Most-Favored Nation (MFN) trading status, a key element in helping the PRC recover from its early 1990s slowdown.

Potential fallout from the weapons sales announcement occurred in the fall of 1992, when the PRC withdrew from its participation in the “Arms Control in the Middle East” talks. A US-Taiwan Business Council – Project 2049 joint report points out, though, that the PRC was “already less than enthusiastic” about the talks and “the F-16 announcement appeared merely to offer a pretext for withdrawing support.” The Bush Administration had already sanctioned the PRC in 1991 for the sale of

---

4 PRC Embassy, “Taiwan Question.”
6 Danielsson, Chinese Reactions, 23.
ballistic missiles and in 1993 reinitiated these sanctions for the renewed sale of DF-11 components to Pakistan.

This episode highlights PRC efforts at transactional diplomacy. By labeling US arms sales to Taiwan as weapons proliferation, the PRC attempted to link them broader non-proliferation efforts, threatening to transfer missile technology to Syria, Iran, and Pakistan in the hopes of influencing future American sales to Taiwan.7

**Conclusion.** The 1992 arms notification greatly improved Taiwan’s defensive strength by providing multiple new capabilities that strengthened Taiwan’s missile defense, air superiority, and counter-amphibious landing capabilities. The notification did not negatively impact US-PRC relations as the PRC did not sever military-to-military relations or cancel or postpone high-level meetings. It did, however, highlight PRC efforts to implement a style of quid-pro-quo diplomacy on US arms sales to Taiwan. Finally, the 1992 case clearly demonstrates that American arms sales to Taiwan do not, by themselves, negatively impact cross-Strait relations or political discussions. Just two month after the announcement of F-16 sales to Taiwan, representatives from the mainland’s Association for Relations Across the Taiwan Strait (ARATS) and Taiwan’s Strait Exchange Foundation met in Hong Kong, resulting in the '92 Consensus. This vague but important recognition, not formally enunciated until eight years later, states that both sides of the Strait agree there is only one China, but differ on their respective interpretations of who represents China. The '92 Consensus later formed the basis for improved CCP-KMT relations during President Ma’s terms in office.

**1997 Notification**

In 1997, the United States notified the sale of 54 AGM-84A Harpoon anti-ship missiles, 1,786 Tube-launched, Optically-tracked, Wirelessly-guided (TOW)2A anti-armor missiles, 21 AH-1W attack

---

helicopters, and 13 OH-58D scout helicopters. The notification of the Harpoon and TOW missiles took place in February 1997, less than a year after the end of the Third Taiwan Strait Crisis. Beginning in the summer of 1995 until March 1996, the PRC conducted a series of provocative missile tests, including impacts at sea as close as 30 miles from Taiwan’s two main harbors, in response to what it perceived as Taiwanese moves toward independence. American President Bill Clinton responded by dispatching two aircraft carrier battle groups to the region in mid-March and on 23 March 1996 Taiwanese voters selected sitting President Lee Deng-Hui in the island’s first democratic election. Notification of the sale of the attack and scout helicopters occurred in July 1997 just after the start of the Asian financial crisis.

**Taiwan Military Readiness.** The 1997 notification improved Taiwan’s defensive stature by providing it with both new capabilities as well as systems designed to defend against an amphibious invasion. The AGM-84A Harpoon missiles could be loaded on Taiwan’s frigates, as well as on their newly acquired F-16s, to defend against an amphibious assault or blockade. The TOW-2A notification was Taiwan’s first purchase of the anti-tank missiles and could be mounted on Taiwan’s HMWWVs as well as its AH-1W attack helicopters. Although Taiwan had previously purchased AH-1Ws and OH-58Ds in 1990, unlike fighter aircraft, the helicopters can disperse easily and operate from concealed locations with devastating effect against an amphibious landing force.

In addition to weapons notifications, following the Third Taiwan Strait Crisis the Clinton Administration “quietly forged an extensive military relationship with Taiwan” expanding cooperation to levels not seen since 1979.8 During the crisis, the United States realized that it did not sufficiently understand Taiwanese military decision-making or its

---

priorities, and did not possess the ability to deconflict, much less coordinate, potential military operations with Taiwan. “The Clinton Administration quietly decided to forge the military-to-military contacts with Taiwan, known in the Pentagon’s lexicon as ‘software.’ Taiwan needs software almost as much as it needs hardware.” \(^9\) Later progress included “visits by Taiwanese military leaders to Washington and a sharing of ideas between uniformed officers about military strategy in East Asia and about Taiwan’s response to an invasion.”\(^{10}\)

**US–PRC Relations.** The 1997 weapons notifications did not negatively impact US-PRC relations. Following the notifications in February and July 1997, the PRC issued statements condemning the weapons sales but did not cancel any high-level meetings or exchanges. In fact, in October 1997, CCP General Secretary Jiang Ze-Min conducted the PRC’s first state visit to the United States since the crackdown in Tiananmen Square, and in the summer of 1998, President Clinton visited Beijing.

**Conclusion.** The 1997 arms notification greatly improved Taiwan’s defensive ability by providing new systems in addition to improved counter-amphibious landing capabilities. Furthermore, during this period, the United States strengthened its planning and discussions with the Taiwan governing authorities and military. The sale resulted in the standard PRC denouncements, but did not negatively impact US-China relations. At this time, the PRC was still attempting to overcome the lingering fallout from the Tiananmen Square massacre and its provocative behavior during the Third Taiwan Strait Crisis, continuing its annual fight for Most Favored Nation status, and pursuing membership in the World Trade Organization, all of which likely helped to moderate PRC responses to American arms sales to Taiwan.

\(^9\) Mann, “U.S. Has Secretly Expanded Military Ties.”

\(^{10}\) Mann, “U.S. Has Secretly Expanded Military Ties.”
**2001 Notification**

On 23 April 2001, two days after the annual Arms Sales Talks between Taiwanese and American defense officials, President George W. Bush announced the sale of four EDA Kidd-class destroyers; eight diesel-electric submarines; 12 P-3C anti-submarine aircraft; 40 AGM-65 Maverick air-to-surface missiles; 360 Javelin anti-tank missiles; 54 Mark-48 torpedoes; 44 Harpoon submarine-launched anti-ship missiles; 144 M109A6 Paladin self-propelled howitzers; 54 AAV7A1 amphibious assault vehicles; AN/ALE-50 electronic countermeasure (ECM) systems for F-16s; 12 MH-53 mine-sweeping helicopters; and 50 Joint Tactical Information Distribution System (JTIDS) terminals to Taiwan. The president deferred decisions on Aegis-equipped destroyers, M1A2 main battle tanks, and AH-64 attack helicopters.\(^{11}\) DoD subsequently notified the sale of M1A2 later in 2001, although never purchased, and Taiwan finally signed a Letter of Acceptance for AH-64 helicopters in 2008. President Bush denied the sale of Joint Direct Attack Munition (JDAM) GPS-guided bombs and AGM-88 High-speed Anti-Radiation Missiles (HARM) for Taiwan’s F-16s.\(^{12}\)

Just under two years before this announcement, on 7 May 1999, the United States dropped five GPS-guided weapons on the Chinese Embassy in Belgrade during Operation ALLIED FORCE. Viewed by some Chinese as an intentional act to signal American dominance over a growing but still militarily inferior PRC, the attack was a seminal moment in US-PRC relations and mainland China severed military relations in response. Additionally, on 1 April 2001, a PLAAF J-8 and US Navy EP-3 collided approximately 70 miles from Hainan Island, killing the J-8 pilot and severely damaging the EP-3, forcing it to land at a PRC airfield. The PRC released the EP-3 crew 10 days later, but the mishap

---


aircraft remained in PRC custody when President Bush announced the arms sale to Taiwan on 23 April 2001.

**Taiwan Military Readiness.** The weapons sale announced in April 2001 significantly strengthened Taiwan’s defensive capability. The Kidd-class destroyers, P-3C anti-submarine aircraft, submarine-launched Harpoon missiles, and AGM-65 Maverick missiles represented new systems for Taiwan. These systems, together with proposed diesel-electric submarines, Mk-48 torpedoes, and MH-53 minesweeping helicopters, significantly improved Taiwan’s ability to defend against a Mainland invasion or blockade.

**US-PRC Relations.** Despite constituting the largest arms sale notification since 1992, President Bush’s 2001 announcement did not damage US-PRC relations. PRC Vice Foreign Minister Li Zhao-Xing summoned Ambassador Joseph Prueher to lodge a ‘strong protest’, and to inform him the “sale would ‘seriously affect’ China-US cooperation.” The Chinese Ambassador also delivered a letter of protest to the State Department. The PRC response, however, “avoided some of the more inflammatory language used by China in the weeks leading up to the arms sale decision. Instead of predicting that the sale would have a ‘devastating impact’ on US-China relations, as China had warned [the week prior], [PRC Spokeswoman] Zhang returned to the more familiar language of earlier diplomatic protests.” The PRC did not, however, cancel any high-level meetings or events. The damaged EP-3 was dismantled and flown to Hawaii in July 2001. Furthermore, President

---

Bush attended the APEC summit in Shanghai six months after the arms sale notification in October 2001 including a meeting with Jiang Ze-Min, followed by a February 2002 presidential visit to Beijing.

**Conclusion.** President Bush’s 2001 notification of arms sales significantly improved Taiwan’s defense by providing Taiwan new capabilities as well as systems to counter an amphibious invasion or naval blockade. Despite the massive size of the notification, the sale did not negatively impact US-PRC relations. The PRC gained Permanent Normal Trade Relations on 10 October 2000, but as of April 2001, had not yet acceded to the World Trade Organization (WTO), likely tempering its response to the arms sales. Additionally, the American bombing of the PRC’s embassy in Belgrade and EP-3 incident had already taxed US-PRC relations, leaving less flexibility for a strong response. The PRC later joined the WTO in December 2001, followed by Taiwan on 1 January 2002.16

Another likely reason for the PRC’s measured response was the lack of Aegis destroyers in the notification. “Although the Chinese government blasts any weapons sales to Taiwan as unacceptable foreign interference, it concentrated its lobbying efforts against the Aegis system rather than the entire list of arms that Washington might sell. China’s leaders fear[ed] that Aegis, combined with US plans for a theater missile defense system, would embolden Taiwan to put off the idea of reunification with China further—perhaps indefinitely.”17 The PRC drew a red line at what it viewed as the inclusion of Taiwan in a theater


missile defense with Japan, cooperation that in its view would exceed the bounds of unofficial relations between the US and Taiwan.\footnote{Danielsson, \textit{Chinese Reactions}, 17.}

The United States also possibly delayed the sale of Aegis ships due to concerns about Taiwan’s ability to fund and operate the advanced radar system given its many other recent purchases.\footnote{Lev, “China Softens Criticisms of U.S.”} Additionally, in an attempt to deter continued PRC missile build-up across the Strait, “Bush told senior aides he would revisit the Aegis issue in a year or two, and would be inclined to approve such a sale if China continue[d] to add to a 300-strong arsenal of ballistic missiles pointed toward Taiwan.”\footnote{CNN, “Beijing Anger Expected Over U.S.-Taiwan Arms Sales,” CNN, 24 April 2001, \url{http://edition.cnn.com/2001/WORLD/asiapcf/east/04/23/taiwan.arms/index.html}.}


Potentially more concerning for the PRC than the arms sale announcement was President Bush’s declarations in two separate television interviews that, despite its previous policy of ambiguity, the United States would respond with military force to help defend Taiwan in the event of a mainland attack, stating the US would do “whatever it took to help Taiwan defend theirself [sic].”\footnote{Lev, “China Softens Criticisms of U.S.”}

\textbf{2008 Notification}

On 3 October 2008, DoD notified Congress of the sale of 32 UGM-84L submarine-launched Harpoon anti-ship missiles, 330 PAC-3 missiles, 30 AH-64E attack helicopters, the upgrade of Taiwan’s four E-2T AEW aircraft to the E-2K standard, and 182 Javelin anti-armor
missiles. The 2008 notification, and the sale of UH-60s in 2010, represented the completion of the delayed sale of several systems announced by President Bush in 2001. The sale of these systems lingered short of completion due to political and budgetary conflicts in Taiwan between President Chen Shui-Bian of the Democratic Progressive Party and the Kuomintang-controlled legislature.

The year 2008 also marked the first time the United States bundled all of its sales into one package, such that the DoD notified Congress of all of the programs on the same date. Although the DoD completed the Letter of Request paperwork for the arms sales in early 2008, the Bush Administration held the requests for 10 months until October, after the summer Olympics in Beijing, in an apparent attempt to conform to the “China calendar,” and find a least-worst moment for notification.23 For the United States, this delay had the added benefit of allowing the sale to take place after independence-minded President Chen Shui-Bian had left office and instead occurred under his successor, President Ma Ying-Jeou, who ran on a platform of improved cross-Strait relations and avoiding surprises in Taiwan’s relationship with the United States.

**Taiwan Military Readiness.** The systems notified for sale in 2008 strengthened Taiwan defensive capability. The sale provided Taiwan with the new ability to employ Harpoon missiles from submarines, improving Taiwan’s defense against amphibious assaults and blockades. Taiwan also purchased 330 PAC-3 missiles that equipped one training and six operational batteries. Together with Taiwan’s upgrade of its existing three PAC-2 batteries to the PAC-3 standard notified in 2007, Taiwan will soon possess nine operational PAC-3 batteries, providing it an extremely credible anti-missile defense. Taiwan’s purchase of the AH-64E made it

---

the first foreign operator of the advanced model of the attack helicopter. Although similar in function to the AH-1W, the sale of an additional 30 top-of-the-line aircraft provided Taiwan with increased numbers of helicopters to counter amphibious assaults. Finally, neither Taiwan’s purchase of Javelin missiles nor its upgrade of its four existing E-2Ts to E-2Ks represented either a significant new capability or additional weapons quantity to fill a critical defensive need.

**US–PRC Relations.** The 3 October notification of arms sales damaged US-PRC relations. In addition to its usual statements regarding the harm caused to US-PRC relations by weapon sales to Taiwan, “Foreign Ministry spokesman Qin Gang confirm[ed the] cancellation of military-to-military exchanges with the US as a response to the October 3 arms sales announcement.” Additionally, the DoD confirmed the PLA suspension of port visits by US naval vessels. Exactly a month after the congressional notification, however, ARATS Chairman Chen Yun-Lin visited Taipei, marking the highest-level cross-Strait dialogue in a decade. This visit once again demonstrated that PRC anger with American arms sales does not bleed over into cross-Strait relations. Following two visits to Beijing by Deputy Assistant Secretary of Defense David Sedney, at the conclusion of the US-China Strategic and Economic Dialogue discussions on 28 July 2009, China agreed to restore military-to-military relations.

**Conclusion.** The 2008 notification strengthened Taiwan’s defensive capability by both introducing new systems to Taiwan’s military as well as by increasing the quantity of weapons designed to provide missile defense and to counter amphibious assaults. The PRC, however, in a break from past precedent, severed military-to-military relations. This was potentially due to the PRC’s belief that despite being an almost purely defensive weapon, Taiwan’s purchase of PAC-3 systems crossed a red line the PRC had drawn for the sale of missile defense systems, submarines, and fighter aircraft. Additionally, following the
2008 financial crisis, many China observers noted increased confidence on the part of the PRC based upon its relatively smooth weathering of the global economic shocks compared to the United States, and the US’ preoccupation with election year politics and security challenges in Iraq and Afghanistan.

The PRC’s attempt to punish the United States through the severance of military-to-military relations demonstrates its belief that at least some American decision-makers greatly value military-to-military relations with the PRC. While there are legitimate concerns about great power rivalry that support US-PRC engagement, it is also likely true that the PRC gains much more than the US does through such contacts. While some observers, including the US-Taiwan Business Council and Project 2049 in their joint report suggest that “there is no evidence that the defense relationship has yielded tangible, major benefits to the United States at least since 1991, and perhaps even since 1979,” the United States should pursue expanded contacts but not to the detriment of its other interests.

2010 Notification

On 29 January 2010, DoD notified Congress of the sale of 114 PAC-3 missiles, 60 UH-60 Blackhawk utility helicopters, two Osprey Mine Hunting Ships, 35 Multifunctional Information Distribution System (MIDS) Low Volume Terminals (LVTs), 10 ship-launched RTM-84L, and two air-launched ATM-84L Harpoon telemetry missiles for testing. Similar to the 2008 notification, the DoD bundled all of these programs into a single notification delivered to Congress on the same day.

Taiwan Military Readiness. Taiwan’s military readiness marginally benefitted from the 2010 notification. None of the sales introduced a new capability to Taiwan, as it already possessed PAC-3 systems, transport helicopters including S-70s, the civilian version of the

---

24 Danielsson, *Chinese Reactions to Taiwan Arms Sales*, 25.
25 Kan, *Taiwan: Major U.S. Arms Sales*, i.
UH-60, and mine hunting capability. The 114 PAC-3 missiles increased Taiwan’s Patriot missile stockpile, thereby increasing its missile defense capabilities. The two Osprey mine hunting ships increased the size of Taiwan’s mine hunting fleet, which improves the island’s ability to counter an amphibious invasion or blockade. The UH-60, however, did not directly contribute to one of the three key mission areas: missile defense, counter-amphibious assault, or air superiority. Additionally, after agreeing to the purchase, Taiwan decided that 15 of the new helicopters would go to Taiwan’s civilian rescue agency instead of the Army, further reducing the sale’s usefulness to the military. Finally, Taiwan already possessed MIDS data link capability and the system is an incremental upgrade to Taiwan’s existing JTIDS data-link network.

**US-PRC Relations.** As in 2008, the 2010 notification damaged US-PRC relations. In addition to its statements and demarches opposing the arms sales, on 30 January 2010, China’s Defense Ministry suspended “scheduled military exchanges and ‘partially halt[ed]’ all exchange programs between the two militaries, as well as halting Vice-Ministerial consultation on strategic security, arms control, and anti-proliferation.” Additionally, the PRC declined Secretary Gates’ request to visit the mainland in June 2010. The 2010 notification also marked the first time that the PRC threatened to impose sanctions on American companies that sold weapons to Taiwan. The PRC resumed military-to-military relations after an almost yearlong suspension, approving Secretary Gates’ eventual visit to Beijing on 10 January 2011.

**Conclusion.** Despite failing to introduce new capabilities for Taiwan’s defense, the 2010 notification marginally improved the island’s defensive capabilities by increasing the quantity of PAC-3 missiles and

---


27 Danielsson, *Chinese Reactions to Taiwan Arms Sales*, 96.
minesweepers, thereby improving Taiwan’s missile defense and anti-amphibious assault and counter-blockade capabilities. Similar to the 2008 notification, however, the notification hurt US-PRC relations because of the PRC’s decision to sever military-to-military relations. The PRC also for the first time attempted to sanction companies involved in arms sales to Taiwan. Despite the strongly defensive nature of the systems included in the notification, the PRC again likely viewed the inclusion of missile defense technology as broaching a red line in arms sales to the island. Additionally, the PRC likely viewed the United States as still weakened by the 2008 financial crisis.

**2011 Notification**

On 21 September 2011, DoD notified Congress of the “retrofit” of Taiwan’s 145 F-16A/B aircraft, now 143 after crashes in May 2013 and January 2016. According to the US-Taiwan Business Council, Taiwan intended to pursue both the upgrade of its existing F-16 fleet and purchase of new F-16C/Ds. As of 2016, however, Taiwan’s 2006 request for the sale of 66 F-16C/D aircraft remains pending.

**Taiwan Military Readiness.** The upgrade of Taiwan’s F-16 A/Bs, scheduled to finish in 2022, will not markedly improve Taiwan’s defensive capabilities. Although the new aircraft will possess Active Electronically Scanned Array (AESA) radars, the Joint Helmet-Mounted Cueing System (JHMCS), and AIM-9X missiles, the aircraft will still be fourth generation fighters. They will still carry the same AIM-120 missiles they did before the upgrade, meaning that even if the upgraded aircraft can detect PRC fighters from a greater distance, they will still have the same weapons employment ranges and lethality. Taiwan’s major air superiority need remains additional airframes to replace its retiring F-5s and potentially its Mirage-2000 and IDF fighters.

---

Upgrading Taiwan’s existing F-16s will make them slightly more capable, but will not increase the TAF’s number of aircraft, which already stands at least at a four-to-one disadvantage relative to the fighter forces of the PLAAF. Additionally, after the upgrade, Taiwan’s F-16s will only retain approximately 4,000-5,000 hours of their original 8,000-hour service lives. This contrasts with 8,000 or even 12,000-hour service lives for new F-16C/Ds, meaning that even after the retrofit, the service lives of Taiwan’s F-16s will not extend any further into the future.

**US-PRC Relations.** Following the notification of the planned upgrade of Taiwan’s F-16s, “China voiced opposition to the arms package but did not take follow-up action.”29 Vice-Foreign Minister Zhang Zhi-Jun stated the sale “would inevitably undermine bilateral relations,” and “summoned US Ambassador Gary Locke to protest against the deal.”30 Despite suspending some minor activities, however, the PRC did not sever military-to-military relations, cancel any high-level visits, or sabotage other facets of US-PRC relations. Peking University professor Zhu Feng posited the reaction was aimed at a domestic audience stating, “China’s grandstanding gesture, with very little action, is an attempt to avoid giving Chinese people the impression that despite the US’s ongoing arm sales to Taiwan, the authorities are not responding in a robust manner.”31 Additionally, in 2011, the CCP was preparing for its once-in-a-decade leadership transition from outgoing CCP General Secretary Hu Jin-Tao to incoming General Secretary Xi Jin-Ping, increasing PRC desires for stability during the handover and decreasing PRC incentives to more fervently protest the arms sale notification.

---

31 BBC, “China Hits Out at U.S. Deal on F-16 Fighters.”
Conclusion. The 2011 notification of an upgrade to Taiwan’s existing F-16 fleet will not noticeably improve Taiwan’s defensive capabilities. Additionally, despite the PRC’s standard protestations, the deal did not negatively impact US-PRC relations. Many scholars believe that the PRC drew a red line prohibiting the introduction of new fighter aircraft, although selling Taiwan additional F-16s does not truly introduce a new capability as it already operates 143 of the aircraft. The United States’ choice to upgrade Taiwan’s existing F-16s instead of selling new aircraft did not violate the PRC’s red line, leading to a less severe Mainland response. American desire for PRC support on sanctions against Iran, from whom the PRC purchases approximately 10 percent of its oil, may also have influenced the United States’ decision to upgrade Taiwan’s existing aircraft rather than provide new fighters.

Ironically, the United States has encouraged other regional partners, including Japan, South Korea, Australia, and Singapore to purchase more and newer fighter aircraft due to threats to regional security, including the PRC. Taiwan, which faces a greater threat than any of these countries, and has requested additional F-16s for 10 years, did not receive confirmation of a sale or even the status of its long-standing request. Furthermore, if the United States intended to sell Taiwan fighter aircraft anytime in the 2010s, 2011 would have been an opportune moment given the transition of power from the PRC’s fourth generation leaders to the fifth in late 2012 and the PRC’s desire for stability during this handover.

It is also telling that the United States labeled the notification as a “retrofit” instead of upgrade, as an apparent attempt to downplay any improvement in capabilities for Taiwan. This verbiage has not been

---

used prior or since for upgrades of other nations’ s F-16 fleets. As with
the 2008 and 2010 notifications, the DoD delayed the notification of
three programs from late 2010 until September 2011. This delay was
ostensibly to deconflict the arms sale notification with CCP General
Secretary Hu Jin-Tao’s visit to Washington and Defense Secretary Gates’
visit to Beijing, both in January 2011; a PLA General’s visit to the United
States in May 2011; the Chairman of the Joint Chiefs of Staff’s visit to
Beijing in July 2011; and Vice President Joseph Biden’s visit to Beijing in
August 2011.33

2015 Notification

On 16 December 2015, DoD notified Congress of the sale of two
EDA Oliver Hazard Perry-class frigates; 36 AAV-7 amphibious assault
vehicles; 769 Tube-launched, Optically-tracked, Wirelessly-guided (TOW)
2B missiles; 250 man-portable Stinger missiles; 208 Javelin missiles; 13
Close-In Weapons System (CIWS) guns; and four MIDS On-Ship LVTs.
The notification came after a break in sales of more than four years,
which, according to Senators John McCain (R-AZ) and Ben Cardin (D-
MD) constituted “the longest period since the passage of the Taiwan
Relations Act in 1979.”34

Taiwan Military Readiness. The systems included in the 16
December 2015 congressional notification did not improve Taiwan’s
defensive capabilities. None of the systems provided a unique or new
capability compared to systems already in Taiwan’s inventory. In fact,
Taiwan already possessed versions of all of the seven systems included in

major-arms-sales/republic-korea-rok-kf-16-upgrade-program or Singaporean
upgrade announcement http://www.dsca.mil/major-arms-sales/singapore-f
16-block-52-upgrade-program.

33 Kan, Taiwan: Major U.S. Arms Sales, 47.
34 Cardin, Sen. Benjamin L., and Sen. John McCain. To President Barack
document-letter-from-sens-cardin-and-mccain-to-white-house-on-arms-sales-
to-taiwan.
the notification. When delivered, these systems, especially the missiles, will provide Taiwan with increased quantities of ammunition. The United States has frequently stressed to Taiwan’s military and political leaders the need for sufficient war reserves. Only the two EDA Perry-class frigates, however, assist Taiwan in strengthening its three key threat capabilities. That said, the USS *Gary* and USS *Taylor* were both commissioned in 1984, meaning they are already 32 years-old, nine years older than the oldest of Taiwan’s six indigenously-built Perry-class frigates. Tellingly, although the United States originally offered Taiwan four of the EDA Perry-class vessels, Taiwan only chose to purchase two ships.

Prior to the 2015 TOW 2B missile notification, the United States notified the sale of 1786 TOW 2A missiles in 1997. The TOW2A and 2B are both comparable anti-armor missiles, although the TOW2B possesses slightly longer range and a modified terminal guidance flight path. Before the 2015 Stinger notification, the United States sold Taiwan 1299 Stinger missiles and 170 HMMWV vehicles as part of the Avenger air defense system in 1993. The 2015 sale notified man-portable versus the previous sale of vehicle-mounted missiles. Prior to the 2015 Javelin notification, the Department of State notified Congress of the sale of 360 Javelin missiles in 26 October 2001, with delivery in 2002. In 2008, the United States notified the sale of a further 182 missiles. Before the 2015 AAV-7 notification, Taiwan had already purchased 54 of the same model amphibious assault vehicles from the United States in 2004, with deliveries beginning in 2005. Prior to the 2015 CIWS notification, Taiwan already possessed over 40 CIWS guns installed on its Lafayette-class, Perry-class, Kidd-class, and Knox-class ships. Finally, before the

---


36 AAV-7 Website, [http://blog.xuite.net/herojeff/twblog/129213800](http://blog.xuite.net/herojeff/twblog/129213800).
2015 notification Taiwan already possessed MIDS on all of its large surface combatants.

**US-PRC Relations.** The 16 December 2015 notification does not appear to have harmed US-PRC relations. Following the announcement, PRC Taiwan Affairs Office spokesman Ma Xiao-Guang stated, “we resolutely oppose sales of weaponry or military technology to Taiwan by any country in any form or using any excuse.” The PRC also threatened to sanction the American companies involved (Raytheon, Lockheed Martin, and BAE); however, due to the standing prohibition on US weapons sales to the PRC, none of these companies have large interests on the Mainland. The PRC did not sever military-to-military relations with the United States, as in 2008 and 2010, and did not cancel any high-level meetings. In fact, President Obama and CCP General Secretary Xi met just three months after the notification to Congress on 31 March 2016 on the sidelines of the Nuclear Security Summit in Washington, D.C. Additionally, the arms sale notification did not appear to hamper other areas of recent US-PRC cooperation including the 2014 US-PRC agreement on climate change. On 31 March 2016, both sides announced that they would sign the Paris Climate Conference agreement in New York on 22 April 2016.

**Conclusion.** The 2015 notification of arms sales to Taiwan did not substantially improve Taiwan’s defensive capabilities. The sale will not introduce any new systems to Taiwan. If purchased, the items will increase Taiwan’s war reserve stockpile, but would not markedly improve Taiwan’s defensive capability. Additionally, the announcement did not impact US-PRC relations. PRC reactions were subdued, including standard statements of protest and demarches, but no severance of military-to-military relations and no postponement of high-level meetings. Western media coverage of the sale focused on the lack of “big ticket items,” labeling the notification “uncommonly modest” and offering “little offensive power.” The four-year break in notifications from
21 September 2011 to 16 December 2015 was the longest period without a congressionally notified arms sale to Taiwan since the severance of relations in 1979. Additionally, despite the extended period between notifications, the announced $1.8 billion value was low compared to previous sales notified in 2011 ($5.3 billion), 2010 ($6.4 billion), 2008 ($6.4 billion), and 2007 ($3.7 billion).
Chapter 4

Analysis

Since the United States switched diplomatic recognition from Taiwan to the PRC in 1979, the context of US-PRC-Taiwan relations has changed greatly. Beginning in the 1990s, Taiwan transformed from an authoritarian system to a vibrant democracy, recently holding its fifth presidential election. Meanwhile, the PRC’s economy has grown exponentially, and its military budget has increased almost 10-fold, from $22 billion in 1990 to $214 billion in 2015.\(^1\) During this period, however, Taiwan’s military budget actually decreased, from $11.5 billion in 1990 to $10.7 billion in 2015.\(^2\)

Despite dramatic changes in cross-Strait relations and military balance, American China policy remains unchanged. “The United States welcomes the rise of a stable, peaceful, and prosperous China. We seek to develop a constructive relationship with China... While there will be competition, we reject the inevitability of confrontation. At the same time, we will manage competition from a position of strength while insisting that China uphold international rules and norms.”\(^3\)

The Taiwan Relations Act (TRA) continues to guide American Taiwan policy, requiring the United States to provide “defense articles and defense services in such quantities as may be necessary to enable Taiwan to maintain a sufficient self-defense capability.” According to a 2000 Pentagon report on the implementation of the TRA, “the United States takes its obligation to assist Taiwan in maintaining a self-defense capability very seriously. This is not only because it is mandated by US

\(^2\) SIPRI, “Military Expenditure Database.”
law in the TRA, but also because it is in our own national interest. As long as Taiwan has a capable defense, the environment will be more conducive to peaceful dialogue, and thus the whole region will be more stable.”

In order to foster Taiwan’s security and regional stability, the United States conducts a robust program of security assistance, providing Taiwan with tens of billions of dollars in weapons and related training. The details of this process, however, have changed greatly over time.

**Arms Sale Process**

From 1955 to 1979, Taiwan was a US treaty ally and received $2.4 billion in security assistance grants in addition to its numerous Foreign Military Sales purchases. Following the 1982 Joint US-PRC Communiqué intended to limit and reduce the value of American arms sales to Taiwan over time,

President Chiang Ching-Kuo was concerned that if left to the normal bureaucratic process, Taiwan’s requests for defense articles and services would be subject to PRC pressure and thus be given scant policy attention in Washington. He feared that requests would be ignored if they were processed as routine Letters of Request (LOR) through the normal Foreign Military Sales (FMS) system. As a result, Taiwan pressed for a special arrangement in which it could sit face to face with its American counterparts to present its defense requirements. In doing so, Taiwan could make sure that its requests were registered and that the US bureaucracy was sufficiently involved.

Based on this request, beginning in 1983, the United States treated arms sales to Taiwan as special cases while attempting to ensure they were “defensive” in nature and did not alter the cross-Strait balance.

---

5 Danielsson, *Chinese Reactions to Taiwan Arms Sales*, 7.
“Concerned over possible Chinese intervention, Taiwanese defense officials travelled to Washington to present senior US policy officials with Taiwan’s bundled list of requirements in annual face-to-face meetings during annual arms sales talks.”  

In April 2001, however, following his announcement of arms sales to Taiwan, President George W. Bush cancelled future sessions of the annual US-Taiwan Arms Sales Talks in an attempt to normalize the weapons sale process and treat Taiwan in the same manner as other security cooperation customers. “Taiwan expressed their concern over cancelling the annual forum, arguing that the Arms Sales Talks served as a critical policy-triggering mechanism in the US. Despite attempts to stay out of the limelight, the Arms Sales Talks forum was high profile enough to ensure that Taiwan’s requests were given due attention—not only within the Executive Branch, but within Congress as well. Yet the US interlocutors assured their Taiwan counterparts that future requests would be properly attended to, and that treating Taiwan as a normal security partner would be beneficial to both sides.”

Taiwan’s fears proved true, however, when following the cancellation of the annual Arms Sales Talks, major arms sales notifications to Congress in subsequent years fell by half, from 4.92 per year from 1990 to 2001 to 2.47 per year from 2002 to 2016. Without a regularly scheduled meeting to highlight PRC threats and Taiwan’s arms purchase desires, post-9/11 concerns overshadowed Taiwan’s requests, especially for policy makers facing potential PRC demarches and threatened repercussions.

The lack of a formal meeting also appears to have insulated the executive branch from its TRA-mandated consultations with Congress. In 2011, 45 Senators and 181 Representatives from both parties wrote to

---

6 Danielsson, *Chinese Reactions to Taiwan Arms Sales*, iii.
7 Danielsson, *Chinese Reactions to Taiwan Arms Sales*, iii.
8 Danielsson, *Chinese Reactions to Taiwan Arms Sales*, 9.
the Obama Administration urging the sale of 66 F-16C/Ds to Taiwan.\textsuperscript{9} On 18 November 2011, two months after the announcement of the upgrade of Taiwan’s existing F-16s instead of the sale of additional aircraft, Senator John Cornyn (R-TX) placed a hold on the nomination of Mark Lippert as the Assistant Secretary of Defense for Asian and Pacific Security Affairs, expressing his “serious concern over the... [Obama] Administration’s clear failure to comply with its obligations under the Taiwan Relations Act.”\textsuperscript{10} In 2015, Senators John McCain (R-AZ) and Ben Cardin (D-MD) also criticized the Obama Administration’s security assistance to Taiwan, stating it “must be more robust” and that the threat China “poses to peace and security in the Taiwan Strait, is not being adequately addressed.” Continuing on, they stated their desire for “regular consultations between the Executive Branch and Congress” consistent with the TRA and that “a regular and routine process for the provision of security assistance to Taiwan is essential.”\textsuperscript{11}

In another self-imposed policy restriction, prior to the 2008 summer Olympics in Beijing, the United States began freezing the notification of Taiwan arms sales to Congress for months or even years, bundling these individual systems together into larger packages. Since 2008, the Bush and Obama Administrations have held all four notification packages and forwarded them to Congress on the same day. This bundling allows the United States to reduce the both the quantity and frequency of notifications, and thereby reduce the number of PRC protests. Additionally, it enables the United States to attempt to minimize negative PRC reactions by timing announcements at the “least

\textsuperscript{10} Hodge, “Sen. Cornyn Blocks Obama Nominee Over Taiwan Fighters.”
“worst time” in US-PRC relations. Unfortunately, despite the policy’s best intentions, the ever-expanding number of high-level events with PRC means that there is never a “least worst time” in US-PRC relations, leading to ever-increasing delays, 11 months, then 16, then 20, then 51, between arms sale package notifications.

Following the imposition of this policy, the number of arms sales notifications to Taiwan dropped even further. From 2009 until 2016, DoD notified Congress of 16 major arms sales, or two notifications per year compared to an average of 4.97 from 1990 to 2001, and an average of three notifications per year from 2002 to 2008. Finally, because of bundling, after 27 straight years from 1979 to 2005 with at least one arms sale notification, in six of the past 11 years, DoD has failed to notify Congress of any proposed arms sales to Taiwan.

The packaging of requests led to the over four-year gap in notifications from September 2011 until December 2015, the longest period since 1979 without a congressionally-notified arms sale to Taiwan, and two and a half times longer than the longest previous break. This freezing of notifications violates congressional Foreign Military Sales procedures requiring the government to process Letters of Agreement within specific time limits, generally 60 days. According the US-Taiwan Business Council President Rupert Hammond-Chambers, “there is simply no existing example of notifications being stacked in such a manner.”

In addition to long delays for approved sales, the United States has forced Taiwan to wait in limbo for other critical arms programs. The Bush Administration refused to accept a “letter of request (LOR) for 66 F-16 C/D fighters on three separate occasions: July 2006, February

2007 and June 2007.”13 Now, almost a decade later, Taiwan’s request for F-16 C/Ds remains “under review” by the Obama Administration. Similarly, Taiwan’s request for submarines has sat unanswered since at least 2007. The US-Taiwan Business Council describes this lack of response as “unprecedented.”14

The long and uncertain delays created by these practices complicate Taiwanese efforts at budgeting and defense planning. “In November 2010, Taiwan’s Ministry of National Defense (MND) released a statement noting that since 2007 they have had to return over US $1.4 billion to Taiwan’s treasury as a consequence of US indecision on arms sales. America’s recent inability to offer timely notifications of programs is therefore having a material impact on Taiwan’s ability to fund its self defense.”15 Years-long delays between notifications allow Taiwan and East Asian American allies to question the credibility of American security guarantees and the United States’ commitment to the region. Furthermore, “the longer the interval between the US providing Taiwan with needed arms lasts, the louder China’s shrill objections will be when it resumes. [This delay] will make new arms sales after a dormant period increasingly difficult.”16 Finally, “a de facto freeze on US arms sales to Taiwan, imposed while the PRC continues to expand its military capabilities opposite Taiwan, legitimizes military coercion as a valid tactic for China.”17

14 Hammond-Chambers, “Taiwan Arms.”
16 Hammond-Chambers, “The American Defense Commitment to Taiwan.”
On 16 July 2008, two and a half months before the 3 October 2008 arms sale notification to Congress, the commander of US Pacific Command, Admiral Timothy Keating, confirmed “the administration’s policy was to freeze arms sales to Taiwan [and] ... reportedly confirmed discussions with PRC officials about their objections.” Additionally, in the fall of 2011, “US Secretary of Defense Leon Panetta noted at a press conference that the Chinese had been given a ‘heads-up’ on the 21 September 2011 notification” of the upgrade of Taiwan’s F-16s, rather than the sale of additional aircraft. These incidents strongly suggest that American policy makers not only communicate with their PRC counterparts regarding arms sales to Taiwan prior to congressional notification but also that they weigh outside influences, namely potential PRC reactions in addition to Taiwan’s military needs, in violation of the TRA and “Six Assurances.”

**Effect of Arms Sales on Taiwan’s Defensive Capabilities**

“With the fall of the Soviet Union in 1990 [sic], China initiated a major force modernization program focused primarily on Taiwan.” In response, from 1990 until the mid-2000s, the United States notified numerous systems including F-16A/Bs, PAC-2 missile defense systems, AGM-84 Harpoon anti-ship missiles, AH-1W and OH-58D helicopters, E-2 airborne early warning aircraft, AIM-120C missiles, and Kidd-class destroyers. These systems greatly strengthened Taiwan’s defense by introducing new capabilities and strengthening Taiwan’s ability to conduct missile defense, counter-invasion and counter-blockade operations, and air superiority missions. Despite selling weapons to Taiwan, the United States still endeavored to preserve the regional military balance and stability by declining to sell Taiwan systems more advanced than those possessed by the PRC. This included delaying the sale of advanced fighter aircraft and air-to-air missiles until the PRC

---

18 Danielsson, *Chinese Reactions*, ii.
purchased similar systems from Russia and deferring and eventually denying Taiwan’s request for Aegis destroyers.

Except for 60 UH-60 helicopters and 114 PAC-3 missiles held over to President Obama’s 2010 arms sale package, the 2008 notification represented the last of the weapons authorized by President Bush in his 2001 announcement. The 2008 and 2010 notifications provided new capabilities and strong support to Taiwan’s key missions. With the exception of 2010’s sale of mine hunting ships, however, the United States has not released any weapon systems that represent new capabilities to Taiwan since 2007.

As part of the 2011 and 2015 arms sale notifications, the United States failed to provide new capabilities or additional numbers of key systems that would increase Taiwan’s missile defense, counter-invasion or counter-blockade, or air superiority capabilities. Although initially seen as a complement to the purchase of new F-16s to replace its aging F-5s and Mirage-2000s, Taiwan’s FMS case to “retrofit” 143 F-16A/B fighters became a substitute for new aircraft, despite the fact it will not introduce any new airframes to assist Taiwan with its impending shortfall. In fact, due to the time required to retrofit its planes, Taiwan will be short a further 24 aircraft from 2017 until 2022. Given this decision to retrofit Taiwan’s existing F-16s and its other arms sale choices, “the Obama Administration has not released a single new platform or system to Taiwan” in over seven years in office.\(^{20}\) The lack of new systems means that the United States has based the weapons it sold to Taiwan on a threat assessment completed in 2001, now 15 years old and prior to the PRC’s recent military advances. Furthermore, Taiwan’s request for F-16C/Ds has now been pending for 10 years and it has been

24 years since the United States agreed to sell fighter aircraft to Taiwan. Taiwan has attempted to acquire submarines for 26 years, and although legislative infighting prevented Taiwan from funding the program for five years in the mid-2000s, it has now gone nine years with no progress or indication as to the program’s status. During this period, the PLA threat to the island has continued to grow.

**Effect of Arms Sales on US-PRC Relations**

Regardless of the type of sale, the PRC has a “well-established track record of responding negatively and stridently to public announcements of US arms sales to Taiwan.” Common PRC reactions include diplomatic protests, demarches, demands to cancel the announced sale, and public protests via government-controlled media. The PRC views American arms sales to Taiwan as a violation of the 1982 US-PRC Joint Communiqué and believes that they “reduce the incentive for the Taipei government to negotiate with China, while also increasing popular sentiment on the island in favor of de jure independence.”

Congressional notifications will likely remain the primary trigger for Chinese response due to the systems operational value, their role as a visible reminder of the United States’ commitment to Taiwan’s security, and their apparent validation of Taiwan’s de facto sovereignty. This helps to explain the PRC’s particular antipathy toward FMS sales, which are conducted through government channels.

Between 1990 and the mid-2000s, the PRC’s post-Tiananmen isolation, pursuit of Most Favored Nation trading status and World Trade Organization entry, and promises of American assistance in other fields, such as satellite launches, limited PRC reactions to American arms sale notifications. “In all cases, Chinese spokesmen issued public

---

21 Danielsson, *Chinese Reactions*, iii.
denunciations of the sales. Despite these protests, however, there is no evidence of related or substantial actions by China in response to these rounds of Taiwan arms sales.”

PRC reactions following the 2008 and 2010 notifications differed from those in previous years. “Since 2008, China’s reaction to any announcements of US arms sales to Taiwan seems to reflect an increased confidence in their ability to influence US decision-making in its favor.” Because both notification packages included PAC-3 missile defense systems, the PRC viewed the sale as crossing one of its red lines governing fighter aircraft, submarines, and missile defense systems. Based upon the violation of these red lines, the PRC’s increased military and economic strength, the lack of MFN or WTO admission considerations, the United States’ “focus on military operations in Afghanistan and Iraq, as well as [the US’] overriding interests in international financial issues and its grave concerns over nuclear programs in North Korea and Iran,” the PRC believed it possessed an increased ability to affect the decision-making calculus of American policymakers. As a result, the PRC severed military-to-military relations and cancelled high-level meetings with the United States. “It is noteworthy that [the PRC] chose to cancel military-to-military cooperation. Not because they place great equity on such links, but because [the United States does].” “A significant part of the PLA may view military-to-military exchanges with the United States as largely symbolic, relatively void of substance and, therefore, expendable. On the other hand, some current and former senior Pentagon officials have argued that military relations with China are critical to US national security. Substantial ongoing discussions between senior US defense

25 Danielsson, Chinese Reactions, 18.
26 Danielsson, Chinese Reactions, 6.
27 Danielsson, Chinese Reactions, 6.
28 Hammond-Chambers, “Taiwan Arms: 2 Steps Back, 1 Step Forward.”
policymakers and their counterparts in Beijing are unquestionably useful. There is no evidence, however, that the defense relationship has yielded tangible, major benefits to the United States at least since 1991, and perhaps even since 1979.”

Additionally, in 2010, for the first time, the PRC threatened sanctions against American companies providing weapons to Taiwan, although no evidence exists of PRC enforcement of these sanctions. In fact, in the two quarters following the 2010 notification, “each of the companies mentioned... saw their commercial interests in China expand.” “In addition, if a US company were to face discrimination as a result of Chinese sanctions due to Taiwan arms sales, a case could be introduced to the World Trade Organization (WTO) for adjudication.”

Following the 2011 and 2015 arms sale notifications, given the decrease in the frequency and number of cases, as well as the lack of missile defense, fighter aircraft, or submarine systems that violated its red lines, the PRC response was subdued. Despite issuing public protests and demarching American ambassadors, the PRC did not cancel high-level meetings or sever military-to-military relations. Advance communication of the sales by the United States to the PRC may have helped smooth Mainland responses.

Therefore, according to the preceding case studies, arms sales to Taiwan in recent years have become less helpful to its defense, fewer in number, delayed for political reasons, and bundled together for sale compared to those of previous years. Given these changes, and considering the growing military threat Taiwan faces, it is clear the United States is not solely considering Taiwan’s defense needs, as stipulated by the Taiwan Relations Act, but also weighing potential PRC responses when considering arms sales.

29 Danielsson, Chinese Reactions, 25.
30 Danielsson, Chinese Reactions, 26.
31 Danielsson, Chinese Reactions, iii.
To date, however, PRC responses to US weapon sales to Taiwan have been short in duration and generally ineffective. Following the 2008 and 2010 notifications, the PRC severed military-to-military relations including the cancellation of ministerial or vice ministerial-level meetings. Although not desirable, the severance of military-to-military relations does not threaten the overall stability of US-PRC relations. The United States rightly desires to engage the PRC through military-to-military dialogues in order to influence its development and integration into the current world order, reduce the incidence of unsafe air and naval intercepts, and avoid the great-power trap. The United States cannot force the PRC, however, to participate in these events if it does not view them as being in its interest. Realistically, though, given the vast differences in technology and deployment experience, the PRC stands to gain more from these events than the US, as demonstrated by their repeated resumptions of military-to-military relations after yearlong severances.

PRC efforts to deter arms sales through sanctions of US defense contractors have been ineffective. The fact that all of the major defense contractors are still avidly pursuing contracts in Taiwan indicates that they do not view this threat as a deterrent. Even if the PRC successfully implemented sanctions on a company, legal recourses exist that could remedy the situation. Finally, given increased PRC overseas interests, mainland threats to proliferate missile or other weapon technology increasingly affect their own security as the PRC is now the leading consumer of Middle Eastern oil and is increasingly vexed by its decreasing influence with North Korea. Given these limited options to impact US decision making, “while limited and largely symbolic retaliations for future arms sales cannot be ruled out, the PRC is unlikely
to actually challenge fundamental US interests over arms sales to Taiwan.”\textsuperscript{32}

**Implications**

The United States must consider its Taiwan policy within a holistic framework of the potential outcomes, not just on Taiwan and the PRC, but on global American interests as well. As tempting as it may be to believe that removing “the Taiwan question” would dramatically improve US-PRC relations, the PRC’s position as a rising power challenging the status quo and its recent assertiveness regarding its territorial claims, suggest the PRC would not view American compromise on Taiwan as a move made out of strength, but rather one made out of weakness.

Should the United States continue to defer selling Taiwan weapons that provide new capabilities, as during the past six years, it will not have an immediate impact on Taiwan’s defense. Instead, lacking new capabilities, Taiwan’s military will continue its slow but steady decline, especially considering the rapid and continuing improvement made by PRC forces. Given these increasing military and economic pressures, it is likely that either Taiwan’s leaders would feel pressured to acquiesce to PRC political pressure or cross-Strait stability would suffer. A decrease in the perceived willingness of the United States to support Taiwan would reverberate across the region to US allies and partners, likely leading them to question the substance and durability of US commitments, potentially leading to decreased balancing against and increased attempts to bandwagon with the PRC. It would also severely impact American soft power, seemingly confirming the narrative that the United States is a power in retreat and the PRC is ascendant, lending greater credence to Chinese efforts to affect the current international order.

Decreased American support for Taiwan would likely bring forward the day when the PRC is able to bring Taiwan under its control

\textsuperscript{32} Danielsson, *Chinese Reactions*, 2.
politically, economically, or militarily. Counter to the intent of the United States’ rebalance to Asia and the Pacific, it would risk “legitimizing PRC use of military coercion to resolve political differences with its neighbors and sends a signal to others in the region of a diminished US commitment in Asia.”\textsuperscript{33} Were the PRC to control Taiwan, it would be able to project greater military power and influence in the East and South China Seas and gain unfettered access to the western Pacific. PRC control of Taiwan would extend its control of key industries, such as semiconductor design and manufacturing, threatening American security. Perhaps most consequential, it would silence the world’s only Chinese democracy, thereby extinguishing the most effective beacon for liberalism and pluralism for the Chinese mainland.

Multiple options exist to attenuate or delay these impacts. Most important, while still desiring to engage the PRC as a competitor rather than as an adversary, the United States should shift its China policy from one of aspiration to one grounded in a more transactional style. Instead of appealing to the PRC to change its behavior, often against Beijing’s own interests, the United States should employ a quid-pro-quo-based approach to more effectively influence China to become a responsible regional and global stakeholder.

Another key step would be to develop a clear and coordinated US policy on Taiwan that incorporates the views of both the executive and legislative branches, as is mandated by the TRA. Such a policy would better enable the United States to resist PRC pressure and decrease fluctuations in policy between parties and with changes in presidential administrations.

A reinvigorated US security assistance policy for Taiwan must begin by making greater demands of the Taiwanese themselves. In exchange for continuing security assistance, American policy should

\textsuperscript{33} Danielsson, \textit{Chinese Reactions}, iv.
require Taiwan’s commitment to increased defense spending as a percentage of GDP, currently 1.9 percent, placing it closer to levels budgeted by other nations facing existential threats such as Israel, 5.7 percent, South Korea, 2.8 percent, and Singapore, 3.5 percent.\textsuperscript{34} Shortly after taking office on 4 August 2008, President Ma promised Taiwan would “demonstrate [its] determination to defend [itself] by...raising [its] defense budget to three percent of GDP.”\textsuperscript{35} Taiwan cannot expect even ambiguous American security guarantees if it is not willing to more seriously provide for its own defense. Next, the United States should assist Taiwan in diversifying its economy to lessen its current reliance on trade with the PRC. A large step in this direction would be offering Taiwan membership in the Trans-Pacific Partnership if it proves willing to undertake the politically painful economic changes necessary for admission. Finally, the United States should continue to make clear that any unilateral changes to the status quo by Taiwan would preclude American military assistance. If Taiwan’s political leaders remain sufficiently confident of ongoing US support, they will be more likely to “forego any radical solutions for maintaining Taiwan’s sovereignty and national security status.”\textsuperscript{36}

Several simple American administrative changes would increase the effectiveness of the security assistance provided to Taiwan and decrease adverse PRC reactions. The United States should reinstate the annual Taiwan Arms Talks cancelled by President Bush in 2001. Taiwan is not a normal FMS customer. An annual meeting would ensure that Taiwan’s security assistance requests receive due consideration and would provide an additional forum for discussions between Taiwanese and American defense leaders. Next, the United States should rescind

\textsuperscript{35} Hammond-Chambers, “American Defense Commitment to Taiwan.”
\textsuperscript{36} Danielsson, \textit{Chinese Reactions}, 5.
its 2008 process change of delaying and bundling arms sales notifications according to the “China calendar.” More frequent individual program notifications would be less likely than the current process to arouse PRC ire and would condition the PRC to expect routine and ongoing American assistance to Taiwan. Additionally, individual sales would provide a variable response that the United States could ratchet up or down based upon PRC actions in the South and East China Seas or increased threats to Taiwan. Furthermore, this change would improve Taiwan’s ability to plan for itself, providing it a greater sense of control of its own defense, decreasing Taiwan’s dependence on American security guarantees.

Another part of a renewed US strategy should be to encourage greater Direct Commercial Sales to Taiwan and the authorization of increased technology transfers to allow Taiwan to indigenously construct advanced weapon systems like submarines. After 1983,

“US policymakers paid close attention to FMS-case values, instead stressing direct commercial sales (DCS) for arms to Taiwan. Examples of major DCS programs, or hybrid FMS/DCS programs, during this period include the CM-11/M48H main battle tank, the Indigenous Defense Fighter (IDF), the PFG-2 frigate program, and the Tien Kong air defense system, among others. Because of the smaller public footprint of direct commercial sales, negative PRC responses to these types of US-Taiwan technical transfer [sic], licensed production, or locally assembled within DCS channels appear both subdued and rare.”

Furthermore, the United States should reconsider the requirement to make congressional notifications of security assistance public. Originally passed to ensure arms sales to Taiwan received sufficient congressional debate, “these little-noticed provisions have dramatically altered the climate affecting arms sales to Taiwan. What was once an

---

37 Danielsson, *Chinese Reactions*, 16.
obscure process is now increasingly open to congressional and public debate.\textsuperscript{38} Removing this public reminder of Taiwan’s self-governance and potential irritant to the PRC from the arms transfer process might assist in reducing the strength of PRC protests.

The United States should also work to redefine PRC views of American security assistance to Taiwan. Recognizing PRC attempts to draw red lines around new technologies and key systems, the United States should work to recast the bounds of the conversation. For missile defense, the United States could begin discussions on selling THAAD systems and settle for further Patriot deliveries, if Taiwan has a military requirement for the system. Air superiority discussions should shift to the sale of F-35s, such that Beijing would no longer view the sale of F-16C/Ds as the worst-case option. Following this pattern, Taiwan could still receive critical, if not the most modern, systems for key defense missions.

Next, the United States should publicly link weapon sales to Taiwan with PRC behavior in the East and South China Seas and especially to threats to Taiwan’s security. The United States should tie a future South China Sea ADIZ declaration, for example, to the release of an advanced capability to Taiwan, such as F-16C/D aircraft. The United States should meet PRC systems or actions that threaten Taiwan with the sale of a system that helps to counter that threat. In this way, the PRC would understand that “continued reliance on military instruments of coercion to resolve political differences [would] come at a cost. Sound US-China relations rest upon the assumption that Beijing will adopt peaceful means to resolve differences with Taiwan.”\textsuperscript{39}


\textsuperscript{39} Danielsson, \textit{Chinese Reactions}, 2.
Finally, the United States should remind the PRC of the large and ongoing role the United States plays in keeping Taiwan part of the Chinese sphere of influence and preventing adverse Taiwanese actions, including twice preventing Taiwan from developing nuclear weapons.\textsuperscript{40} The PRC must understand that decreased American involvement in Taiwan affairs would decrease American desires to continue to play this consequential role in the future.

Chapter 5

Conclusion

Taiwan plays a key geostrategic and messaging role for the United States in the Asia-Pacific region and with the PRC specifically. Taiwan’s location at the heart of the first island chain links Japan and South Korea with the Philippines and other US partners in South East Asia, limiting PRC access to the western Pacific. Additionally, Taiwan acts as a bellwether for American allies and partners to gauge the United States’ commitment to the region, especially vis-à-vis the PRC. As an economically successful, ethnically Chinese, liberal democracy, Taiwan also serves as a beacon of freedom and model for potential PRC political reform.

Because some of the PRC’s interests currently conflict with those of the United States, and will likely increasingly do so in the future, the United States should continue its efforts to influence the PRC’s development and integration into the global system. Given its growing strength, the PRC understandably desires to alter the existing international order to best suit its interests. American foreign policy should not attempt to arrest, nor can it realistically stop, the PRC’s development. Policy makers can, however, comprehensively assess the security and political environment in Asia and select policies that best protect and promote American interests, including the preservation of the cross-Strait status quo and Taiwan’s security, as well as positive relations with the PRC.

Despite its strong economy and democratic system, given the complete mismatch in resources, Taiwan can no longer compete head-to-head with PRC militarily. Even Taiwan’s attempts to adopt asymmetric and innovative defense capabilities, paired with the advantages of island defense and foreign arms purchases, cannot guarantee Taiwan’s security without third-party intervention.
Given its international strategic objectives, and considering Taiwan’s security requirements, the United States has conducted a robust program of security assistance, providing Taiwan with tens of billions of dollars in weapons and related training since severing formal diplomatic relations. From 1990 until the mid-2000s, the United States announced the sale of numerous systems that greatly improved Taiwan’s defense by introducing new capabilities or by strengthening Taiwan’s ability to conduct missile defense, air superiority, or counter-invasion or counter-blockade missions. The PRC’s post-Tiananmen isolation, pursuit of Most Favored Nation trading status and World Trade Organization entry, and promises of American assistance in other fields moderated the PRC’s reaction to these sales. Despite selling weapons to Taiwan, the United States still endeavored to preserve the regional military balance and stability by declining to sell Taiwan systems more advanced than those of the PRC.

The 2008 and 2010 notifications, which included Patriot PAC-3 missile defense and AH-64E Apache helicopters, still provided new capabilities and strong support to Taiwan’s key military needs, but represented the last of the weapons President Bush authorized in his 2001 announcement. Since 2007, according to the US-Taiwan Business Council, the United States has not released new capabilities to Taiwan. PRC reactions to these more recent notifications differed from those following previous announcements. In response to the sale of systems which it viewed as crossing red lines on missile defense, and in light of its increased economic strength following the 2008 financial crisis, the PRC severed military-to-military relations and cancelled high-level meetings with the United States. Additionally, in 2010, for the first time, the PRC threatened sanctions against American companies providing weapons to Taiwan, although no evidence exists of PRC enforcement of these sanctions.

During the 2011 and 2015 arms sale notifications, the United States failed to provide new capabilities or additional numbers of key systems that would increase Taiwan’s missile defense, counter-invasion, counter-
blockade, or air superiority capabilities. Given the large decrease in the frequency and number of American sales to Taiwan, as well as the lack of missile defense systems, fighter aircraft, or submarines that violate its red lines, the PRC moderated its reactions to American arms sales. While still issuing protests and demarching American ambassadors, the PRC did not cancel high-level meetings, sever military-to-military relations, or negatively affect American interests, such as the non-proliferation efforts with Iran and North Korea or the climate change negotiations following notifications in 2011 and 2015.

The decrease in the number of US arms sale to Taiwan and reduced utility of those systems appears linked to a fear of angering an increasingly powerful PRC, the lack of political or economic enticements such as MFN and WTO membership to mollify potential PRC responses, and simple benign neglect on the part of the United States toward Taiwan. Although policy makers are aware of China’s importance in economic and security affairs and appear willing to pay the price to resist some of the PRC’s more egregious actions, they fail to perceive the Taiwan’s relevance to this effort and fail to recognize the severity of the potential consequences of neglecting Taiwan. This was evidenced by the “Obama Administration’s decision rhetorically and substantively to omit Taiwan from its pivot to Asia [which] telegraphs to China that Taiwan is no longer central to US policy.”

Two American policy changes during this period also affected the number and frequency of arms notifications to Taiwan. In 2001, President George W. Bush cancelled future sessions of the annual US-Taiwan Arms Sales Talks in an attempt to normalize the weapons sale process and treat Taiwan in the same manner as other security cooperation partners. Unfortunately, given its unique political status and the PRC’s growing power and claims to sovereignty over the island, Taiwan is not like every other

---

customer. The lack of an annual arms sales meeting, coupled with PRC pressure, has led to a marked decrease in the quantity of arms sale notifications from an average of 4.97 per year from 1990 until 2001 to an average of three per year from 2002 until 2008 and an average of just two per year from 2009 through 2016.

Prior to the 2008 Olympics in Beijing, the United States began freezing notifications of arms sales to Taiwan and then bundling the sale of individual systems together into larger packages. This allowed the United States to reduce the both the number and frequency of notifications and to attempt to minimize negative PRC reactions by timing announcements when they are least likely to impact the crowded schedule of bilateral US-PRC events. The freezing of notifications violates instructions requiring the DoD to process Letters of Request and Letters of Agreement within specific time limits. The packaging of requests led to the over four-year gap between notifications from September 2011 until December 2015, the longest period between notifications since 1979 by a factor of two and a half. These long delays complicate Taiwanese defense planning and increase the difficulty of making future notifications after extended periods without sales due to fear of PRC responses.

Therefore, according to the arms sale notifications reviewed, weapon sales to Taiwan in recent years have become less helpful to its defense, fewer in number, delayed for political reasons, and bundled together for sale compared to those of previous years. Given these changes, and considering the growing military threat Taiwan faces from the PRC, it is clear the United States is not solely considering Taiwan’s defense needs when considering arms sales as stipulated by the Taiwan Relations Act. Instead it is also weighing potential PRC responses when considering arms sales to Taiwan.

Given the importance of US-PRC economic and security relations, as well as the number of American interests the PRC is now capable of influencing, American consideration of PRC responses to arms sales to Taiwan, is understandable despite contravening existing law. The United
States, however, must consider any decisions on its Taiwan policy with a holistic view of the impacts, not just on Taiwan and the PRC but on regional and global American interests.

Multiple options exist to attenuate or delay the PRC’s ability to coerce Taiwan. Most importantly, instead of appealing to the PRC to change its behavior, often against its own interests, the United States should attempt to employ a more transactional approach to bilateral relations in an effort to influence China to become a responsible stakeholder. The PRC purposefully links its responses to Taiwan arms sales to interests the United States values, such as non-proliferation, in an attempt to affect the decision-making calculus of US policy makers. The United States, however, often appears hesitant to employ a similar strategy to influence PRC behavior. President George W. Bush appeared to attempt this approach when he deferred the sale of Aegis destroyers to Taiwan in 2001 contingent upon the PRC halting its ballistic missile buildup opposite Taiwan. Despite the continued growth in PRC missile deployments, however, the United States did not follow through on its linkage by selling Aegis destroyers to Taiwan.

A transactional China policy more clearly linking PRC threats to Taiwan or regional security with increased defensive arms sales to Taiwan benefits from straightforward and very defensible logic. The United States must ensure, however, that it does not wantonly employ such a formula due to the risk of escalating tit-for-tat responses. Arms sales to Taiwan would be a powerful bargaining chip to influence PRC behavior because of the island’s centrality to CCP claims of legitimacy. The PRC’s recent East China Sea ADIZ declaration and its island building campaign in the South China Sea could both easily justify additional major defensive arms sales to Taiwan.

Another key step would be to develop a clear and coordinated US policy on Taiwan that incorporates the views of both the executive and legislative branches, as the TRA mandates. Currently, the National Security Council drives American China policy to the detriment of inputs from Congress and the Departments of State and Defense. A better-coordinated
policy would enable increased resistance to PRC pressure and decrease policy disagreements between parties and fluctuations with changes in presidential administrations.

Any renewed US security assistance policy for Taiwan must begin by making demands of the Taiwanese themselves. In exchange for continuing security assistance, American policy should require Taiwan’s commitment to increased defense spending, including fulfillment of recent pledges by presidents of both major parties to spend three percent of GDP on defense.

Several simple American administrative changes would increase the effectiveness of the security assistance provided to Taiwan and decrease adverse PRC reactions. The United States should reinstate the annual Taiwan Arms Talks that President Bush cancelled in 2001. Next, the United States should rescind its 2008 process change of delaying and bundling arms sale notifications according to the “China calendar.” Additionally, the United States should encourage greater Direct Commercial Sales to Taiwan and the authorization of increased technology transfers to allow Taiwan to indigenously construct advanced weapon systems like submarines. Finally, the United States should reconsider the requirement to make congressional notifications of security assistance public, thereby eliminating a visible reminder of Taiwan’s self-governance and a potential irritant to the PRC from the arms transfer process.

The United States should also work to redefine PRC views of American security assistance to Taiwan. Recognizing PRC attempts to draw red lines around new technologies and key systems, the United States should work to redefine the bounds of the conversation to include more advanced systems so that less advanced but still capable systems would not elicit such a strong response. Finally, the United States should remind the PRC of the significant and continuing role the United States plays in preventing a Taiwanese move toward independence.

The goal of American arms sales and overall Taiwan security policy is to provide Taiwan sufficient confidence to negotiate from a position of
strength while simultaneously creating sufficient doubt in the minds of PRC military planners and political leaders that an invasion, blockade, or coercive campaign would be successful. Although these suggested measures will not conclusively solve any cross-Strait disputes, they will assist in strengthening Taiwan’s defensive capabilities while minimizing the impact on US-PRC relations, thereby facilitating American regional and global interests.
Appendix A

US Arms Sales to Taiwan

<table>
<thead>
<tr>
<th>Date of Notification</th>
<th>Major Item or Service as Proposed</th>
<th>Program Value ($ Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/26</td>
<td>Cooperative Logistics Supply Support</td>
<td>$108</td>
</tr>
<tr>
<td>9/06</td>
<td>(1) C-130H Transport Aircraft</td>
<td>$45</td>
</tr>
<tr>
<td>1991</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/07</td>
<td>(100) MK-46 Torpedoes</td>
<td>$28</td>
</tr>
<tr>
<td>07/24</td>
<td>(97) SM-1 Standard Air Defense Missiles</td>
<td>$55</td>
</tr>
<tr>
<td>09/13</td>
<td>(110) M60A3 Tanks</td>
<td>$119</td>
</tr>
<tr>
<td>11/18</td>
<td>Phase III Mod Kits for HAWK Air Defense Systems</td>
<td>$170</td>
</tr>
<tr>
<td>1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05/27</td>
<td>Weapons, Ammunition, &amp; Support for 3 Leased Ships</td>
<td>$212</td>
</tr>
<tr>
<td>08/04</td>
<td>(207) SM-1 Standard Air Defense Missiles</td>
<td>$126</td>
</tr>
<tr>
<td>09/14</td>
<td>(150) F-16 A/B Fighter Aircraft</td>
<td>$5,800</td>
</tr>
<tr>
<td>09/14</td>
<td>(3) Patriot-derived Modified Air Defense System (MADS) Fire Units</td>
<td>$1,300</td>
</tr>
<tr>
<td>09/18</td>
<td>(12) SH-2F LAMPS Anti-Submarine Helicopters</td>
<td>$161</td>
</tr>
<tr>
<td>1993</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06/17</td>
<td>(12) C-130H Transport Aircraft</td>
<td>$620</td>
</tr>
<tr>
<td>06/25</td>
<td>Supply Support Arrangement</td>
<td>$156</td>
</tr>
<tr>
<td>07/29</td>
<td>(38) Harpoon Anti-Ship Missiles</td>
<td>$68</td>
</tr>
<tr>
<td>07/30</td>
<td>Logistics Support Services for 40 Leased T-38 Training Aircraft</td>
<td>$70</td>
</tr>
<tr>
<td>08/04</td>
<td>(4) E-2T Hawkeye Airborne Early Warning Aircraft</td>
<td>$700</td>
</tr>
<tr>
<td>09/08</td>
<td>Logistics Support Services for MADS</td>
<td>$175</td>
</tr>
<tr>
<td>11/04</td>
<td>(150) MK-46 Mod 5 Torpedoes</td>
<td>$54</td>
</tr>
<tr>
<td>11/09</td>
<td>Weapons, Ammunition, &amp; Support for 3 Leased Frigates</td>
<td>$238</td>
</tr>
<tr>
<td>11/23</td>
<td>MK-41 Vertical Launch Systems for Ship-Based Air Defense Missiles</td>
<td>$103</td>
</tr>
<tr>
<td>1994</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08/01</td>
<td>(80) AN/ALQ-184 Electronic Counter-Measure (ECM) Pods</td>
<td>$150</td>
</tr>
<tr>
<td>09/12</td>
<td>MK-45 Mod 2 gun system</td>
<td>$21</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/24</td>
<td>(6) MK-75 Shipboard Guns Systems, (6) Phalanx Close-In Weapon Systems (CIWS)</td>
<td>$75</td>
</tr>
<tr>
<td>06/07</td>
<td>Supply support arrangement</td>
<td>$192</td>
</tr>
<tr>
<td>1996</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05/10</td>
<td>Improved Mobile Subscriber Equipment (IMSE) Communications System</td>
<td>$188</td>
</tr>
<tr>
<td>05/10</td>
<td>(30) TH-67 Training Helicopters, (30) Sets of AN/AVS-6 Night Vision Goggles (NVG)</td>
<td>$53</td>
</tr>
<tr>
<td>05/23</td>
<td>(465) Stinger Missiles, (55) Dual-Mounted Stinger Launcher Systems</td>
<td>$84</td>
</tr>
<tr>
<td>06/24</td>
<td>M60A3TTS Tanks</td>
<td>$223</td>
</tr>
<tr>
<td>08/23</td>
<td>(1,299) Stinger Surface-to-Air Missiles, (74) Avenger Vehicle-Mounted Guided Missile Launchers, (96) HMMWVs (High-Mobility Multi-Purpose Wheeled Vehicle)</td>
<td>$420</td>
</tr>
<tr>
<td>09/05</td>
<td>(110) MK-46 MOD 5 Anti-Submarine Torpedoes</td>
<td>$66</td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02/14</td>
<td>(54) Harpoon Anti-Ship Missiles</td>
<td>$95</td>
</tr>
<tr>
<td>05/23</td>
<td>(1,786) TOW 2A Anti-Armor Guided Missiles, (114) TOW Launchers, (100) HMMWVs</td>
<td>$81</td>
</tr>
<tr>
<td>07/24</td>
<td>(21) AH-1W Super Cobra Attack Helicopters</td>
<td>$479</td>
</tr>
<tr>
<td>09/03</td>
<td>(13) OH-58D Kiowa Warrior Armed Scout Helicopters</td>
<td>$172</td>
</tr>
<tr>
<td>11/09</td>
<td>Pilot Training &amp; Logistics Support for F-16 Aircraft</td>
<td>$280</td>
</tr>
<tr>
<td>11/09</td>
<td>Spare Parts for Various Aircraft</td>
<td>$140</td>
</tr>
<tr>
<td>Date of Notification</td>
<td>Major Item or Service as Proposed</td>
<td>Program Value ($ Million)</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>1998</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/28</td>
<td>(3) Knox-Class Frigates,</td>
<td>1998 = $1,296</td>
</tr>
<tr>
<td></td>
<td>(1) MK15 Phalanx (CIWS)</td>
<td></td>
</tr>
<tr>
<td>06/01</td>
<td>(28) Pathfinder/Sharpshooter Navigation &amp; Targeting Pods for F-16s</td>
<td>$300</td>
</tr>
<tr>
<td>08/27</td>
<td>(58) Harpoon Anti-Ship Missiles</td>
<td>$160</td>
</tr>
<tr>
<td>08/27</td>
<td>(61) Dual-Mount Stinger Surface-to-Air Missiles</td>
<td>$101</td>
</tr>
<tr>
<td>08/27</td>
<td>(131) MK46 Mod5(A)S Anti-Submarine Torpedoes</td>
<td>$180</td>
</tr>
<tr>
<td>10/09</td>
<td>(9) CH-47SD Chinook Helicopters</td>
<td>$180</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1999</strong></td>
<td></td>
<td>1999 = $637</td>
</tr>
<tr>
<td>05/26</td>
<td>(240) AGM-114KS Hellfire II Air-to-Surface Missiles</td>
<td>$23</td>
</tr>
<tr>
<td>05/26</td>
<td>(5) AN/VRC-92E SINCgars Radios,</td>
<td>$64</td>
</tr>
<tr>
<td></td>
<td>(5) Intelligence Electronic Warfare Systems,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5) HMMWVs</td>
<td></td>
</tr>
<tr>
<td>07/30</td>
<td>Spare Parts for F-16A/B, F-5E/F, C-130H, &amp; IDF Aircraft</td>
<td>$150</td>
</tr>
<tr>
<td>07/30</td>
<td>(2) E-2T Hawkeye 2000E AEW Aircraft</td>
<td>$400</td>
</tr>
<tr>
<td><strong>2000</strong></td>
<td></td>
<td>2000 = $1,866</td>
</tr>
<tr>
<td>03/02</td>
<td>Modernization of TPS-43F Air Defense Radar to TPS-75V Configuration</td>
<td>$96</td>
</tr>
<tr>
<td>03/02</td>
<td>(162) HAWK Intercept Guided Air Defense Missiles</td>
<td>$106</td>
</tr>
<tr>
<td>06/07</td>
<td>(39) Pathfinder/Sharpshooter Navigation &amp; Targeting Pods for F-16s</td>
<td>$234</td>
</tr>
<tr>
<td>06/07</td>
<td>(48) AN/ALQ-184 ECM Pods for F-16s</td>
<td>$122</td>
</tr>
<tr>
<td>09/28</td>
<td>(146) M109A5 Howitzers,</td>
<td>$405</td>
</tr>
<tr>
<td></td>
<td>(152) SINCgars Radios</td>
<td></td>
</tr>
<tr>
<td>09/28</td>
<td>(200) AIM-120C Advanced Medium Range Air-to-Air (AMRAAM) Missiles</td>
<td>$150</td>
</tr>
<tr>
<td>09/28</td>
<td>(71) RGM-84L Harpoon Anti-Ship Missiles</td>
<td>$240</td>
</tr>
<tr>
<td>09/28</td>
<td>IMSE Communication System</td>
<td>$513</td>
</tr>
<tr>
<td><strong>2001</strong></td>
<td></td>
<td>2001 = $1,082</td>
</tr>
<tr>
<td>07/18</td>
<td>(50) Joint Tactical Information Distribution Systems (JTIDS) Terminals</td>
<td>$725</td>
</tr>
<tr>
<td>09/05</td>
<td>(40) AGM-65G Maverick Air-to-Ground Missiles for F-16s</td>
<td>$18</td>
</tr>
<tr>
<td>10/26</td>
<td>(40) Javelin Anti-Tank Missile Systems,</td>
<td>$51</td>
</tr>
<tr>
<td></td>
<td>(360) Javelin Missiles</td>
<td></td>
</tr>
<tr>
<td>10/30</td>
<td>Logistical Support &amp; Spare Parts for F-16A/B, F-5E/F, C-130H, &amp; IDF</td>
<td>$288</td>
</tr>
<tr>
<td><strong>2002</strong></td>
<td></td>
<td>2002 = $1,521</td>
</tr>
<tr>
<td>06/04</td>
<td>(3) AN/MPF-14 Air Traffic Control Radars</td>
<td>$108</td>
</tr>
<tr>
<td>09/04</td>
<td>(54) AAV7A1 Amphibious Assault Vehicles</td>
<td>$250</td>
</tr>
<tr>
<td>09/04</td>
<td>Maintenance &amp; Spare Parts for Aircraft, Radars, AMRAAMs</td>
<td>$174</td>
</tr>
<tr>
<td>09/04</td>
<td>(182) AIM-9M-1/2 Sidewinder Air-to-Air Missiles</td>
<td>$36</td>
</tr>
<tr>
<td>09/04</td>
<td>(449) AGM-114M3 Hellfire II Anti-Armor Missiles for AH-1W &amp; OH-58D</td>
<td>$60</td>
</tr>
<tr>
<td>10/11</td>
<td>(290) TOW-2B Anti-Tank Missiles</td>
<td>$18</td>
</tr>
<tr>
<td>11/21</td>
<td>(4) Kidd-Class Destroyers</td>
<td>$875</td>
</tr>
<tr>
<td><strong>2003</strong></td>
<td></td>
<td>2003 = $775</td>
</tr>
<tr>
<td>09/24</td>
<td>Multifunctional Information Distribution System (MIDS) Datalink</td>
<td>$775</td>
</tr>
<tr>
<td><strong>2004</strong></td>
<td></td>
<td>2004 = $1,776</td>
</tr>
<tr>
<td>03/30</td>
<td>(2) Ultra-High Frequency Long Range Early Warning Radars</td>
<td>$1,776</td>
</tr>
<tr>
<td><strong>2005</strong></td>
<td></td>
<td>2005 = $280</td>
</tr>
<tr>
<td><strong>2006</strong></td>
<td></td>
<td>2006 = $0</td>
</tr>
<tr>
<td><strong>2007</strong></td>
<td></td>
<td>2007 = $3,717</td>
</tr>
<tr>
<td>02/28</td>
<td>(218) AMRAAMs,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(235) Maverick Air-to-Ground Missiles for F-16s</td>
<td>$421</td>
</tr>
<tr>
<td>08/08</td>
<td>(60) AGM-84L Harpoon Block II Anti-Ship Missiles</td>
<td>$125</td>
</tr>
<tr>
<td>09/12</td>
<td>(144) SM-2 Block IIIA Standard Air-Defense Missiles for Kidd-Class</td>
<td>$272</td>
</tr>
<tr>
<td>09/12</td>
<td>(12) P-3C Maritime Patrol/Anti-Submarine Warfare Aircraft</td>
<td>$1,960</td>
</tr>
<tr>
<td>11/09</td>
<td>Patriot Advanced Capability (PAC)-2 Upgrade to PAC-3</td>
<td>$939</td>
</tr>
<tr>
<td>Notification Date</td>
<td>Major Item or Service as Proposed</td>
<td>Program Value ($ Million)</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/3</td>
<td>(330) PAC-3 Missile Defense Missiles</td>
<td>2008 = $6,463</td>
</tr>
<tr>
<td>10/3</td>
<td>(32) UGM-84L Submarine-Launched Harpoon Anti-Ship Missiles</td>
<td>$3,100</td>
</tr>
<tr>
<td>10/3</td>
<td>Spare Parts for F-16A/B, F-5E/F, C-130H, &amp; IDF Aircraft</td>
<td>$200</td>
</tr>
<tr>
<td>10/3</td>
<td>(182) Javelin Anti-Armor Missiles</td>
<td>$334</td>
</tr>
<tr>
<td>10/3</td>
<td>Upgrade of (4) E-2T AEW Aircraft to Hawkeye 2000 Configuration</td>
<td>$250</td>
</tr>
<tr>
<td>10/3</td>
<td>(30) AH-64D Apache Longbow Attack Helicopters, (173) Stinger Air-to-Air Missiles, (1,000) AGM-114L Longbow Hellfire Missiles</td>
<td>$2,532</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/29</td>
<td>(114) PAC-3 Missiles Defense Missiles</td>
<td>2009 = $0</td>
</tr>
<tr>
<td>01/29</td>
<td>(60) UH-60M Black Hawk Utility Helicopters</td>
<td>$2,810</td>
</tr>
<tr>
<td>01/29</td>
<td>(12) Harpoon Block II Anti-Ship Telemetry (Training) Missiles</td>
<td>$3,100</td>
</tr>
<tr>
<td>01/29</td>
<td>(60) Multifunctional Information Distribution System (MIDS) Receivers</td>
<td>$340</td>
</tr>
<tr>
<td>01/29</td>
<td>(2) Osprey-Class Mine Hunting Ships</td>
<td>$105</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/21</td>
<td>Retrofit of 145 F-16A/B Fighter Aircraft</td>
<td>2011 = $5,852</td>
</tr>
<tr>
<td>09/21</td>
<td>Continuation of Luke AFB F-16 Training &amp; Logistical Support</td>
<td>$5,300</td>
</tr>
<tr>
<td>09/21</td>
<td>Spare Parts for F-16A/B, F-5E/F, C-130H, &amp; IDF Aircraft</td>
<td>$500</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/16</td>
<td>(2) Excess Defense Article Oliver-Hazard Perry-Class Frigates (FFG-7)</td>
<td>$190</td>
</tr>
<tr>
<td>12/16</td>
<td>(13) MK15 Phalanx Block 1B CIWS, (8) CIWS Block 1 to Block 1B Upgrade Kits</td>
<td>$416</td>
</tr>
<tr>
<td>12/16</td>
<td>(250) Stinger Man-Portable Air Defense (MANPAD) Missiles</td>
<td>$217</td>
</tr>
<tr>
<td>12/16</td>
<td>(769) TOW 2B Aero Missiles</td>
<td>$268</td>
</tr>
<tr>
<td>12/16</td>
<td>(208) Javelin Guided Missiles</td>
<td>$57</td>
</tr>
<tr>
<td>12/16</td>
<td>(36) AAV-7 Amphibious Assault Vehicles</td>
<td>$375</td>
</tr>
<tr>
<td>12/16</td>
<td>Follow-On Support to Maintain MIDS and JTIDS Datalink Systems</td>
<td>$120</td>
</tr>
<tr>
<td>12/16</td>
<td>Taiwan Advanced Tactical Datalink &amp; Link-11 Integration</td>
<td>$75</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td>2016 = $0</td>
</tr>
</tbody>
</table>

Appendix B
US Arms Sales to Taiwan per Annum

Congressionally Notified Arms Sales to Taiwan by Year ($ Millions)

Source: Kan, Taiwan: Major U.S. Arms Sales, 56-59.
Academic Papers


Articles


Books


Government Documents


US Department of State. “Joint Communiqué of the United States of America and the People’s Republic of China (Shanghai


Interviews


Letters


Press Releases


Reports

Danielsson, Lotta, ed. “Chinese Reactions to Taiwan Arms Sales.” The U.S.-Taiwan Business Council and Project 2049 Institute. March