



REPUBLIC OF KOREA WEAPONS ACQUISITION
THROUGH THE POST-COLD WAR AND THE CASE
OF THE SAM-X PROJECT: IMPLICATIONS FOR
US-ROK RELATIONS

THESIS

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**Presented to the Faculty of the Graduate School of Logistics
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George A. Hutchinson, Captain, USAF

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*To the generous mind
the heaviest debt is that of gratitude,
when 'tis not in our power to repay it.*

--Dr. Thomas Franklin

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Abstract

The dissolution of the Soviet Union has ushered in a new era. With the Cold War arrangement no longer in place, relations between the US and friendly nations are being subject to redefinition. In the arms trade, the post-Cold War era has produced expanded opportunities for recipient countries, opening new and autonomous paths for defense acquisition. For the Republic of Korea (ROK), a traditionally steadfast recipient of US weapons and weapons technology, this has resulted in the emergence of alternative sources for arms procurement. Thus, the supplier-recipient relationship between the US and ROK, traditionally dominated by US supplier control, is beginning to take on more of a supplier-customer orientation.

This thesis sought to comprehensively examine ROK weapons development and acquisition policy through the post-Cold War period. Historical developments surrounding the US-ROK arms trade relationship were thoroughly examined and a case study of the ROK's surface-to-air missile defense project (SAM-X) was performed to provide an understanding of US-ROK relations in the post-Cold War environment. Results from the research conclude that, in terms of arms development and acquisition, a more productive course can be set for future dealings between the US and South Korea. Through a better understanding of the intent and direction of ROK policy, it is possible for the US and ROK to settle into a win-win arrangement.

**REPUBLIC OF KOREA WEAPONS ACQUISITION THROUGH
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I. INTRODUCTION

This thesis identifies and documents developments in the evolution of the defense industrial and weapons procurement policy of the Republic of Korea (ROK), and assesses the implications of these developments on US-ROK relations. Since the end of World War II, the ROK and the US have shared a strategically significant economic and military relationship marked by strong political ties and mutual amity. An important aspect of this relationship has been a steady stream of military hardware and assistance from the US. For the ROK, military assistance and weapons sales from the US have served as a protective bulwark against North Korean communist aggression and as a facilitator of sustained economic growth and prosperity.

The collapse of Soviet communism and subsequent emergence of Russia as an international arms competitor have substantially increased weapons purchasing and supplier options for the newly prosperous ROK. New markets are being created outside of the traditional US-ROK arms trade arrangement, and fresh opportunities are presenting themselves to the ROK in the form of inexpensive weaponry and tempting transfers of technology. For the US, the dissolution of the Soviet Union has resulted in reductions in

military budgets and a steady draw down of armed forces. Fewer opportunities exist for US defense contractors to market weapon systems to the cash-strapped Department of Defense (DOD). In an effort to help the US defense industry avoid mass layoffs and factory shutdowns while maintaining necessary minimum capacity levels, the US government, through the Department of Commerce, recognizes a need for US contractors to be competitive in the international arms market.

The end of the Cold War has affected the ROK and US in profoundly different ways. It is from this premise that ROK weapons development and acquisition policy will be examined. The following paragraphs will provide a brief introduction to ROK defense industrial development as a historical backdrop to the problem statement presented later in the chapter.

Background

US military involvement began in Korea shortly after the Japanese defeat in World War II with the arrival of the US 7th, 40th, and 6th Infantry Divisions during the month of September 1945, at the Port of Inchon (1:31-32). The first mission carried out by US forces was to receive Japanese surrender and create a South Korean internal security force. With the approval of General Hodge, the Commanding General of US Army Forces in Korea, the National Constabulary was established under the US military government in the area south of the 38th parallel on 15 January 1946 (2; 1:32).

The constabulary consisted largely of Koreans who had military experience in the Japanese or Chinese armed forces or in the Korean Restoration Army in China. The constabulary was to become the nucleus of the National Defense Forces created on August 15, 1948, when the Government of the Republic of Korea was inaugurated. (2)

When war broke out on the Korean Peninsula on 25 June 1950, ROK forces were ill-prepared. Poorly equipped and barely trained, ROK forces were initially caught off guard and nearly decimated by the North Korean onslaught.

Within two weeks of the surprise attack, President Truman authorized US air, naval, and ground forces to intervene on the side of South Korea (1:33). After two years of bitter negotiations and see-saw battles, "the UN Command finally managed to sign an armistice agreement with the communist side," the Democratic People's Republic of Korea (DPRK; referred to as "North Korea" or the DPRK throughout this thesis) and their ally, the People's Republic of China (referred to as China or the PRC throughout this thesis), on 27 July 1953 (2).

The aftermath of the Korean War re-established the 38th parallel as the demarcation line dividing the communist-backed DPRK and US-supported ROK. Initially, ROK forces were completely dependent on the US for all forms of military support:

Due to the lack of modern equipment and leadership, ... the ROK military required consistent assistance from the United States. The US Army transferred essential military items, vehicles, ammunition, fuel, and replacement parts and turned over all its inventory to the ROK Army after the war. Even supplies such as clothing and consumables were provided by the US military. (1:34)

In order to thwart another communist encroachment, the ROK would remain solely dependent on the US for various forms of military assistance until the early 1970s.

Prompted by the Nixon Doctrine, and the subsequent decision in December 1971 by the US to withdraw the 7th Infantry Division, the ROK government proclaimed a "state of national emergency" and embarked on the development of an indigenous defense industry (3).

Weapons production for the ROK army actually began in 1971, "when a memorandum of agreement between the US and the ROK authorized the Ministry of National Defense to construct a plant to assemble US-designed Colt M-16 rifles" (4). In 1973, the ROK government enacted the Law on Military Supplies in which "various measures were taken to foster and support defense industries" (3). Steps included in the act were "creation and operation of a support fund, provision of subsidies, taxation privileges, contractual favors and a defense fund-raising drive." Shortly after the fall of South Vietnam in 1975, "the defense tax system was introduced to accelerate the development of domestic defense industries." By the mid-1970s, the ROK government had "signed agreements to begin licensed production of many types of United States-designed weapons, including grenades, mortars, mines, and recoilless rifles" (4). In addition, the ROK began to "manufacture ammunition for the weapons it produced for the army".

In 1976, under the Korea Defense Industry Promotion Act, the ROK government established the Korea Defense Industry Association for the purpose of promoting local manufacture of weapons (5). "Since that time, Korean manufacturers have seized an ever increasing portion of their defense pie."

The ROK's pursuit of domestic production continued to develop throughout the 1970s. In 1978, the ROK "successfully developed missiles and multi-firing rockets" (3). Also in that year, "preparations were completed for the indigenous production of M-48A3 and M-48A5 tanks." The 1980s brought closer military ties with the US, and the ROK was able to focus comfortably on conventional weapons improvement and expanded research and development. "A South Korean-built destroyer, the 'Ulsan-ham,' was put

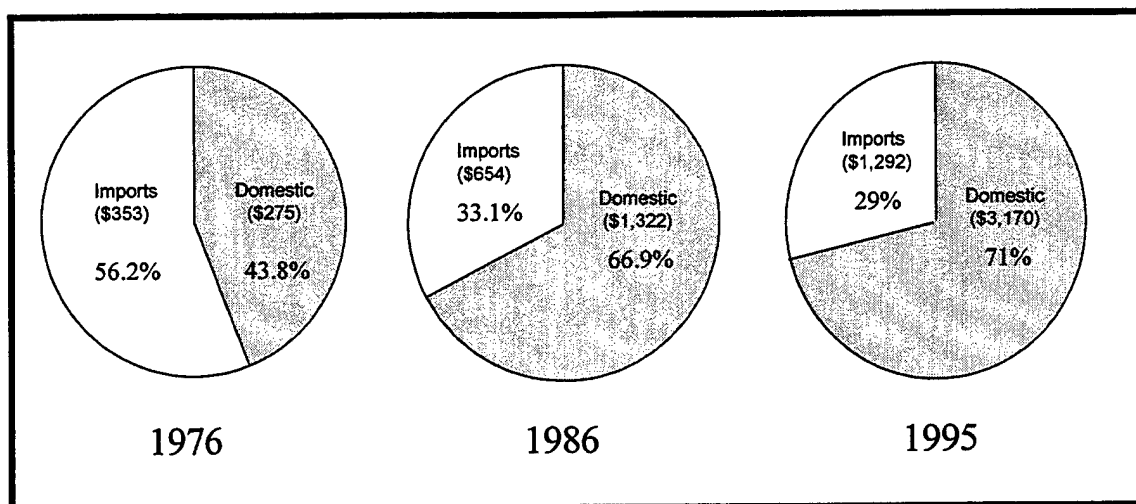


Figure 1. "The Defense Pie." Domestic ROK Arm Production Versus Imports as a Percentage of Total Acquisitions for Selected Years (US \$million) (6)

into service in March 1980." In 1982, the year in which the Second Force Modernization Program was launched, the ROK began producing F-5F fighter-bombers in a joint venture with the US contractor, Northrop.

"By 1990, ROK army contracts were being awarded to South Korean companies to produce tanks, self-propelled and towed field guns, armored vehicles, and helicopters" (4). These contracts included indigenous production by a division of Hyundai to produce the "88" Tank, formerly the "K-1," the "result of a joint US-ROK design." The contracts also included co-production activities, as in the co-production of H-76 helicopters by the Sikorsky Aircraft Corporation and the South Korean firm, Daewoo.

The 1990s have brought less dependence of the ROK upon traditional mechanisms of reliance on the US for defense support and assistance. The bilateral and multilateral defense agreements that defined the parameters of the Cold War began undergoing tremendous change. In an effort to diplomatically envelop North Korea, the

ROK initiated diplomatic normalization with the PRC and the Soviet Union in 1989 and 1990, respectively. The collapse of the Soviet Union in December 1991, brought an end to the Cold War bipolar framework. No longer constrained by years of traditional bipolar arrangements and treaties, the ROK found itself in a better position to view internal weapons development and procurement issues with a sharper focus on their own national interests.

Unlike Europe, however, the 1990s have not shown signs of a qualitative transformation in the bilateral military alliance structures in Northeast Asia. The US is maintaining a constant force structure in Japan and the ROK despite rapprochement with the PRC and Russia. It is the potential for change in these bilateral alliances (between the US and its Northeast Asian allies) that is "forcing each country in the region to rethink its own requirements for ensuring security and promoting national interest" (7:169-170).

In its *ROK Policy on National Defense*, distributed through the Embassy of the Republic of Korea, in Washington, D.C., the ROK has recognized the need for close military cooperation between "neighboring countries to maintain the perception of regional stability and peace" (8). Unthinkable a decade before, the 1990s have seen the ROK begin inter-military exchange and cooperation with Japan, the PRC, and Russia. In a move to build confidence in a budding ROK-Japan military relationship, the ROK executed a "Letter on the Prevention of Accidents between Korean and Japanese Military Airplanes effective 5 June 1995." During the Russian defense minister's visit to the ROK in May 1995, the two countries signed agreements and a Memorandum of Understanding on Military Exchange for 1996-1997 signifying that "the two nations' military relationship has entered the phase of practical cooperation." After the ROK set up a

defense attaché office in the South Korean Embassy in Beijing in December 1993, the PRC followed up with an office in the Chinese Embassy in Seoul in 1994. At a senior working-level officials meeting held in February 1995, the two countries agreed to gradually expand military exchanges into the future. The ROK has clearly demonstrated its desire to more independently determine the direction of its military policies.

From the perspective of arms sales and transfer of weapons technology, the US-ROK relationship is at an important juncture, caught up in the complex and rapidly changing geo-political environment that is currently shaping the world. For many years, the ROK and the US shared a common goal of thwarting communist expansionist plans; the US in a global context, and the ROK in a more focused, regional context. The ROK's commitment to deter North Korean attack parlayed into a larger, and because of the nuclear question, more menacing global conflict between the US and Soviet Union. Considering this, and the pace at which the ROK was developing its own indigenous defense industry, reliance on US weapons and technology by the ROK was a given.

The end of the Cold War not only lessened the overarching potential for global conflict between the US and Soviet Union, but it came at a point when, for the first time in recent history, the ROK was being taken seriously by its regional neighbors as an economic power. This was vividly portrayed in 1990, when Seoul agreed to lend the ailing, former Soviet Union \$3 billion in cash and goods. After giving \$1.47 billion, the ROK halted further disbursement in 1992 after Moscow failed to meet interests payments (9).

As a way to recoup the overdue Russian debt, the ROK agreed in 1995 to accept Russian defense equipment (10). Initially, the ROK agreed to receive about half of a

\$457 million overdue installment that came due in 1993 in the form of weapons, with the other half in raw materials and civilian helicopters (11). Pavel Fitin, deputy head of the South Korean department in Russia's foreign Economic Relations Ministry spoke on the issue, saying that the agreement signed by the two countries on 10 July 1995, "is completely satisfactory for the Russian side [however] ...we'll do our best to increase the arms share in [future] agreements" (11).

A watershed event in the US-ROK arms sales relationship that represents the ROK's desire to wield independent discretion in its military policy is the case of the SAM-X project, a comprehensive air defense program run by the ROK Air Force (ROKAF). A successful test-firing of a Nodong 1 missile in 1993, among other advancements in offensive weapons technology made by North Korea, prompted the ROK's implementation of the SAM-X project. The project required a sophisticated state-of-the-art missile defense system, the likes of which the ROK would have to purchase from an offshore supplier. Raytheon's Patriot PAC2 missile system was introduced to the ROK in 1994 under the control of the US Eighth Army to protect US forces stationed in South Korea. This put Raytheon in a favorable position to deal directly with ROKAF and ROK government officials with the hopes of concluding a major weapons sale. At the same time, however, Russia was eyeing the potential sale as an opportunity to pay off its remaining debt to the ROK. Through their state-run weapons export company, Russia offered their S-300V ground-based air defense system (12). When the ROK entertained the option of either going with the Russian system or the US-made Patriots, controversy erupted. Unlike the past, the US was now merely a "contender" for an estimated \$1 billion contract for a weapons system in the ROK. When asked about the issue during a

trip to Asia, US Defense Secretary William Cohen voiced opposition, warning that a decision in favor of the Russian system "...would not play well in Congress at all." He added, "It would not be a good deal, I think, overall ultimately for our relationship. It's important that they [the ROK] stay with US equipment" (13). After noting that a contract in Russia's favor would be a good method to pay back some of Russia's overdue debt to the ROK, Russian ambassador to the ROK, George F. Kunadze, accused Secretary Cohen of "bullying a customer into buying merchandise" (14).

As of this writing, the ROK government is withholding a decision as to which system to purchase. The decision that the newly-elected government of Kim Dae-Jung makes on the issue could potentially change the course of a longstanding and stable defense relationship dominated by US doctrine, strategy, leadership, and technology. Regardless of the ROK government's ultimate decision, a markedly changed US-ROK relationship has emerged with regard to weapons sales. By identifying developments in the evolution of the defense industrial and weapons procurement policy of the ROK, and examining the case of the SAM-X air defense project, this thesis will assess the depth and extent of the changing US-ROK relationship.

Problem Statement

Considerable contributions have been made to the study of arms production in developing countries and supplier-recipient relationships. With specific regard to the US-ROK relationship, a good deal has been written documenting and explaining both the evolution of the ROK arms industry and the US-ROK relationship, vis-a-vis the arms trade. Some works, in particular, have explained the US-ROK relationship from the

supplier control-recipient autonomy framework. Most, if not all of these contributions have adequately addressed issues and events up to the dissolution of the Soviet Union.

However, the dissolution of the Soviet Union has ushered in a brand new era. Along with the many changes that are occurring, relations between the US and friendly nations are being redefined. A Cold War arrangement is no longer in place. Thus the supplier-recipient relationship, which had all the trappings of a bipolar dominant state-client state relationship, is taking on what appears to be more of a supplier-customer orientation.

The post-Cold War era has thus far witnessed tectonic shifts in global economic and trade relations. Expanded opportunities have opened new paths which have profoundly affected the ROK's approach to defense and defense acquisition policy. Meanwhile, US policy with regard to arms sales has likewise been affected. ROK weapons development and acquisition policy must be re-examined, with an inclusion of developments that have occurred during the post-Cold War. A thorough re-examination should yield an accurate assessment of the evolving US-ROK relationship as it pertains to the arms trade.

By better understanding the motives, intent, and direction of ROK policy, a more productive course can be set for future dealings between the US and South Korea involving policy issues such as arms trade, including co-production, licensing, and weapons technology transfer.

Research Objective

The purpose of this thesis is to identify, analyze, and assess patterns in the ROK indigenous defense industry and weapons procurement process as they have evolved, up to and through the post-Cold War era. By tracking this evolution through a historical filter composed of ROK political development, US-ROK relations, and the ever-looming threat from North Korea, a clearer understanding of South Korea's motives, intent, and the direction of its current policy can be obtained. Thus, the ultimate objective of understanding the US-ROK relationship with regard to the arms trade can be undertaken. A better understanding of ROK policy with regard to the arms trade and weapons acquisition provides a reference for US policy to set a productive course for future dealings with an important ally. The Korean Peninsula provides fertile ground for researching the foreign political and defense industrial challenges that the US faces in an ever-evolving world.

Research Questions

The premise upon which this thesis is built is threefold: 1) As the eventual absorption of North Korea is becoming an accepted planning factor, the ROK is projecting an increasing dynamic and independent position in its relations with the US. 2) Throughout the world, traditional (Cold War) bilateral and multilateral defense agreements are undergoing fundamental shifts. Free from the constraints inherent to the traditional bipolar arrangement, the ROK can now view internal defense development and weapons procurement with a sharper focus on national interests. 3) With the ROK projecting higher levels of autonomy with an increasing focus on national interests, it

may choose an alternative to the traditional US-ROK arms trade arrangement. Thus, a longstanding relationship dominated by US doctrine, strategy, weaponry, and technology could possibly be experiencing an irrevocable shift.

With these presuppositions in mind, research questions were developed which would examine the evolution of ROK weapons development and acquisition policy from three different perspectives: ROK political development, US-ROK relations, and the threat from North Korea. Through this examination, background and meaning will be provided necessary to explore and understand events surrounding the SAM-X project. To facilitate this, questions were developed which could adequately follow events leading up to SAM-X implementation and address the issue of US-ROK maneuvering with regard to the project. By exploring these questions, along with a look at the formal ROK acquisition process, the relationship between the US and ROK with regard to exchange of weapons for the post-Cold War era could be fully assessed. Research questions developed for the thesis effort are as follows:

1. How has the evolution of the South Korean political system helped shape weapons development and acquisition policy?
2. How have US-ROK relations affected the development of the ROK defense industry and acquisition policy since the end of World War II, and the establishment of the Republic of Korea?
3. How has the threat posed by North Korea impacted the direction of ROK defense weapons development and acquisition policy?
4. Why did the SAM-X project evolve into a priority ROK defense program?
5. How has the SAM-X project reflected changes from the traditional conduct of ROK-US relations, vis-a-vis weapons sales?

6. What is the current arms acquisition process utilized by the ROK?
7. Has a "new" paradigm emerged which describes the relationship between the US and ROK with regard to exchange of weapons for the post-Cold War era?

These research questions have been formulated as a guide to conduct the thesis research effort. A literature review entailing the development of the ROK's defense industry is provided in Chapter III. In this chapter, ROK defense industrial development is examined against a backdrop made up of its internal political evolution, U.S.-ROK relations, and the North Korean threat. The methodology employed to link research questions to answer these questions will be discussed in Chapter II. Chapter IV explores the case surrounding the implementation of the ROK Air Force's missile defense endeavor, the SAM-X project, and Chapter V outlines the ROK defense acquisition process. The last chapter, Chapter VI, contains a discussion of the findings from the research questions, as well as conclusions and recommendations based on the research.

Limitations and Scope

To grant widest distribution and offer easiest access to this thesis for potential readers, the research effort has been conducted entirely through the use of unclassified material. Furthermore, no sanitized classified information was used for research purposes. However, some individuals who provided information requested that they not be cited in this thesis. The request of these individuals will be respected; their contributions will be cited as "unnamed source."

This thesis examines the ROK-US relationship in the context of weapons development and acquisition. A comprehensive historical analysis of ROK weapons development and acquisition policy will be presented. A case study involving the ROKAF's SAM-X project will also be presented. Finally, the thesis will conclude with a look at the ROK's acquisition process.

Definitions of Terms

To assist the reader, Appendix A (Glossary of Terms) contains a comprehensive list of definitions related to this thesis. Appendix B (Glossary of Acronyms) houses a list of all relevant acronyms.

II. Methodology

Chapter Overview

The intent of this chapter is to explain methods that were used to meet the research objectives of this thesis. This chapter will explain the research process that was developed to gather, analyze, and interpret information regarding ROK weapons development and acquisition policy. Explanation of the research process will acquaint the reader with the overall research strategy, data collection process, and models used to analyze and interpret the results of this thesis. In addition, a presentation of methods used to ensure reliability and validity of the research effort and its findings will be included.

Research Process

The research process consists of "specific planned and controlled steps for empirically investigating a problem" (15). The purpose of the research process is "to provide findings, conclusions or products in which a high degree of confidence can be placed" (15). Therefore, in an effort to thoroughly investigate the stated problem and fulfill the research objectives of this thesis, a process was developed using the following three basic elements:

- (1) a research strategy,
- (2) a data collection process, and
- (3) a research design (16:1-26, 94, 139).

Research Strategy. The majority of this thesis focuses on historical events which have shaped ROK weapons development and acquisition policy, and therefore, required extensive historical research. Archived data from a variety of sources was used to support this research. A third and separate approach was used to explore and analyze the case of the SAM-X, as it is a relatively current issue. Therefore, to effectively treat all presented topics and fulfill stated objectives, this thesis combines three separate research strategies:

- (1) a history strategy,
- (2) an archival analysis strategy, and
- (3) a case study.

A history strategy was the first and most significant strategy employed as an approach toward fulfilling the research effort. According to Gawronski, through history, one seeks to "understand the human past in an effort to better understand an ever changing present, with the ambitious hope that such an understanding will provide worthwhile guidelines for the future" (17:6). Gall, Borg, and Gall consider historical research to be a "process of systematically searching for data to answer questions about phenomenon for the purpose of gaining a better understanding of present institutions, practices, trends, and (issues)" (18:644). Daniels asserts, "[Historical] research is necessary to find the evidence of past events; to sift, organize, and interpret the evidence; to show, as nearly as possible, what really happened—and how and why" (19:78). Thus, to accurately assess the evolving US-ROK relationship as it pertains to the arms trade, a thorough historical examination of ROK weapons development and acquisition policy

was required. Carr illustrates the importance of historical research as a basis from which to assess information:

The historian distils from the experience of the past, or from so much of the experience as is accessible to him, that part which he recognizes as amenable to rational explanation and interpretation, and from it draws conclusions which may serve as a guide to action. (20:105)

South Korean weapons development and acquisition policy are the sum result of numerous complex, and isolable events brought on by perceived national need and defined by the ROK-US relationship. According to Aron, "History, whether military or political, has to pursue the interplay of complementary and contrary intentions, which events may either implement or thwart" (21:12). The historical significance of actions is established "by discovering the intentions of the actors." Thus, to apply meaningful perspective, the principal actors involved in the evolution of the ROK's weapons development and acquisition policy were identified in the literature review: South Korea, the US, and North Korea. These principal actors provide the component basis from which the Literature Review is organized. The Literature Review is composed of three components:

- (1) ROK political development,
- (2) US foreign policy and relations with South Korea, and
- (3) the North Korean threat.

These three components were organized as structural units and examined separately through five successive ROK political regimes. In addition to accomplishing a thorough understanding of ROK weapons development and acquisition policy, the motive

for conducting analysis in this manner was to detect the presence of trends and changes as they would occur over time. Mosely and Usry support this notion:

To gain a proper understanding of historical events, the historian looks at the underlying or basic structure and process of the situation in which events took place. In addition to looking at the structure of the situation, the historian may elect to view historical events in terms of process. This involves a careful examination of the changes in a structure. An awareness of the changes in the structure helps the historian to see various interrelationships and provides insight into the possible underlying causes of the observed actions or events. (22:6)

In describing the philosophy of history, Aron quotes Leopold von Ranke's phrase, "The highest aim of the historian is to discover and relate *wie es geschehen ist*—how it happened" (21:6). Supporting this, Yin asserts that a history strategy should be employed when there is no control over behavioral events, the focus of research is not on contemporary events, and the research questions to be answered are of the "how" and "why" variety (16:6). Research questions 1-3 (presented in Chapter I, page 12) are of the "how" variety:

1. How has the evolution of the South Korean political system helped shape weapons development and acquisition policy?
2. How have U.S.-ROK relations affected the development of the ROK defense industry and acquisition policy since the end of World War II, and the establishment of the Republic of Korea?
3. How has the threat posed by North Korea impacted the direction of ROK defense weapons development and acquisition policy?

These research questions offer a framework which is intended to provide a complete and thorough understanding of events that have shaped ROK weapons development and acquisition policy. Additionally, through this framework, events leading up to the SAM-X project could be thoroughly analyzed.

The second research strategy utilized to support this thesis research effort involved the use of archival records and data. Gall, Borg, and Gall explain that "primary sources of historical information are sometimes contained in archives, [where] access to them can be carefully monitored" (18:654). Historical research conducted for this thesis was supported by retrieval of archived documentation (mostly quantitative) from various sources. Yin portrays archival analysis as collections of records, lists, and data that help answering research questions such as "how much" and "how many," and describes its strength as providing precise quantitative information (16:6, 80, 83). This strategy was conducted by retrieval and analysis of data from various government and non-profit sources. The data were used to not only support the historical information presented in the literature review, but to add a dimension of validity to the overall research effort.

The third strategy chosen to facilitate the research effort was the utilization of a case study. According to the General Accounting Office, a case study is "a method for learning about a complex instance, based on a comprehensive understanding of that instance obtained by extensive description and analysis of that instance taken as a whole and in its context" (23:15). Patton refers to case studies in the following manner:

Case studies [are] particularly useful where one needs to understand some special people, particular problem, or unique situation in great depth, and where one can identify cases rich in information--rich in the sense that a great deal can be learned from a few exemplars of the phenomenon in question. (24:54)

The SAM-X case was chosen as an embedded unit of analysis to be explored within the larger framework of ROK weapons development and acquisition policy. The intent behind incorporating a case study strategy into the research scheme was to provide an additional, illustrative level of analysis. Yin describes case studies as an appropriate research strategy for endeavors that focus on contemporary events, require no control of behavioral events, and that help to answer research questions in the form of "how" and "why." Research questions 4 and 5 (presented in Chapter I, page 12) are of the "why" and "how" variety, respectively:

4. Why did the SAM-X project evolve into a priority ROK defense program?
5. How has the SAM-X project reflected changes from the traditional conduct of ROK-US relations, vis-a-vis weapons sales?

The case of the ROK SAM-X project provides the reader with a glimpse of the evolving ROK weapons development and acquisition process. It serves to validate trends and analyses gleaned from the historical analysis of information presented in the literature review. It also serves as a means to evaluate a potentially changed relationship between South Korea and the United States with regard to exchange of weapons. In describing the case study, Patton supports these notions:

Case studies are particularly valuable when the evaluation aims to capture individual differences or unique variations from one program setting to another, or from one program experience to another. Regardless of the unit of analysis, a qualitative case study seeks to describe that unit in depth and detail, in context, and holistically. (24:54)

In summary, the overall research strategy chosen to complement the research process for this thesis has been a combination involving a history, an archival analysis, and a case study. Criteria for choosing these strategies are based largely on Yin's adaptation of COSMOS Corporation's "Relevant Situations for Different Research Strategies." Criteria included (1) the type, or form of research question, (2) the degree of researcher control over behavioral events, and (3) whether or not there exists a focus on contemporary events (16:6).

Data Collection Process. Cooper and Emory discuss the need for analyzing data once it has been collected: "Data analysis usually involves reducing accumulated data to a manageable size, developing summaries, (and) looking for patterns" (25:67). In order to carry this portion of the research effort out, particular methods and procedures were instated which were conducive to the research strategy and design. The premise upon which data collection was performed in support of thesis was based on the concept of "triangulation." Yin describes the method of "triangulation," or the use of multiple sources as a relevant principle of data collection:

[The use of multiple sources of evidence] allows an investigator to address a broader range of historical, attitudinal, and behavioral issues. With triangulation, the potential problems of construct validity can be addressed, because the multiple sources of evidence essentially provide multiple measures of the same phenomenon. (16:92)

In a methodological sense, the research strategies previously discussed were intended to provide multiple avenues to explore the primary unit of analysis of this thesis, ROK weapons development and acquisition policy. Data were retrieved and analyzed in

support of exploring each of these respective avenues. Supporting this notion, Patton asserts that it is "possible to achieve triangulation within a qualitative inquiry strategy by combining different kinds of qualitative methods, mixing purposeful samples, and including multiple perspectives" (24:188). For the purpose of this research effort, data collection was performed mainly through the search and retrieval of documented historical information, supported by archival data from US and ROK government sources and various non-profit agencies. Information from these sources was extracted, sorted, and stored in a "thesis file" and/or home computer for subsequent analysis and review.

Research Design. Cooper and Emory refer to a thesis research design "[as] a framework for specifying the relationships among the study's variables" (25:114). Yin explains that "a research design links the data to be collected (and the conclusions to be drawn) to the initial questions of a study" (16:18). The research design chosen for this thesis was developed using a framework made up of five major components: (1) research questions; (2) a primary unit of analysis; (3) an embedded unit of analysis; (4) the literature review presented in Chapter III; and (5) some criteria for interpreting information (16:18-26, 104).

Research questions were designed prior to the formulation of the conceptual research design model framework. These questions were refined throughout the thesis research effort to ensure full coverage and analysis of the primary unit of analysis (ROK weapons development and acquisition policy), as well as the embedded unit (the SAM-X case). From this coverage, an assessment of ROK-US relations with regard to weapons sales was made. Miles and Huberman point out that "the formulation of research

questions can precede or follow the development of a conceptual framework, but in either case represents the facets of an empirical domain that the researcher most wants to explore" (26:35). The research questions, primary unit of analysis, and embedded unit of analysis are as follows:

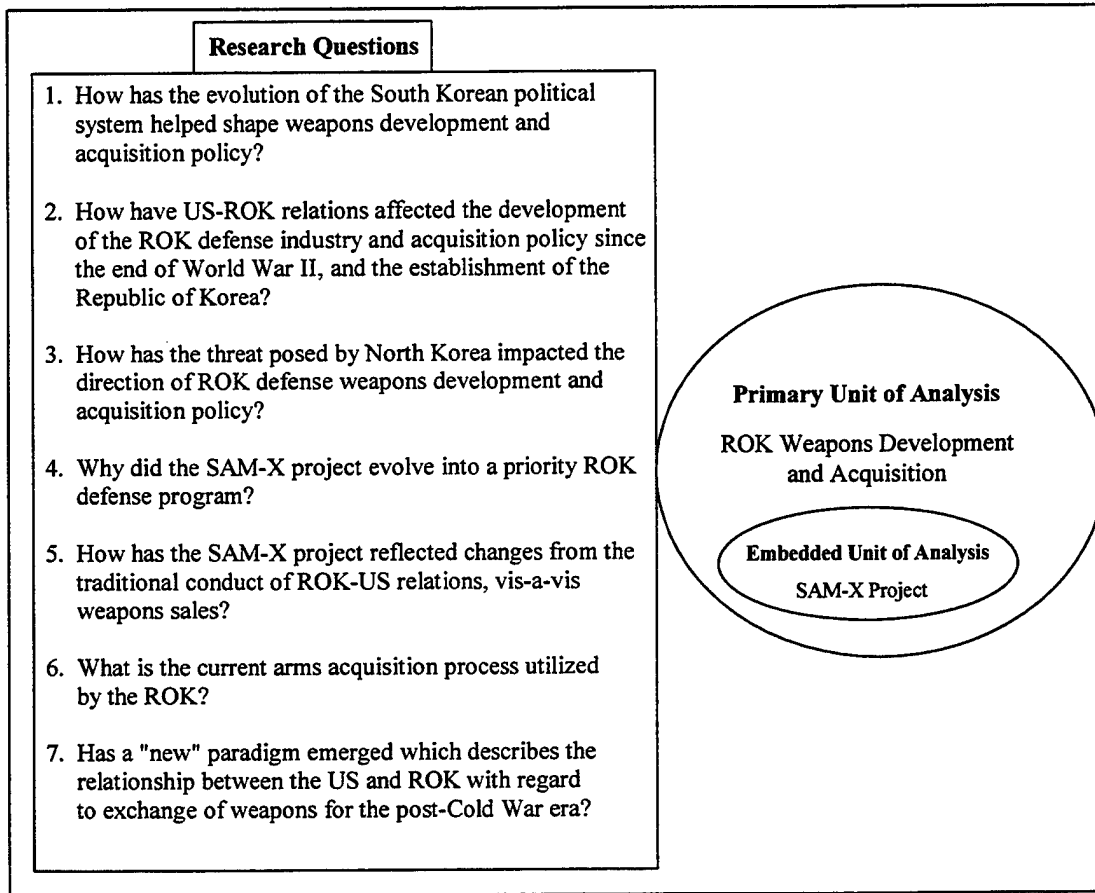


Figure 2. Components of the Research Design (Research Questions, Primary Unit of Analysis, and Embedded Unit of Analysis)

The literature review was structured with the intention of providing clarity, coherence, and purposeful parameters required to thoroughly view the primary unit of analysis, ROK weapons development and acquisition policy. The literature review

begins with two foundational elements: (1) the reason for arms from a South Korean Perspective; and (2) historical events leading up to modern US-ROK relations. From this foundation, the rest of the chapter is arranged chronologically and examined by respective ROK presidential regimes. A chronological structure was used because "causal events occurred linearly over time" (16:139). Each regime is viewed from the bounds of its environment, vis-a-vis three component sub-structures: (1) ROK political development; (2) U.S.-ROK relations; and (3) the North Korean threat. It is through this medium that the primary unit of analysis, ROK weapons development and acquisition policy, is analyzed. Thus, the literature review provides all background information necessary to meaningfully present the embedded unit of analysis, the SAM-X project (Chapter IV).

Criteria for interpreting research findings will be based on analysis presented in Chapter VI. Information will originate from the literature review (Chapter III), the SAM-X case (Chapter IV), and the chapter describing the formal ROK acquisition process (Chapter V). From this information, answers to research questions will result, and conclusions and recommendations will be ascertained.

To increase the study's reliability and validity, Chapter VI will employ the concept of theory triangulation (discussed under the heading "Reliability and Validity"). In addition to analysis presented in research findings, factors depicting criteria for assessing "recipient dependency" will be examined. Chapter V will describe the formal ROK acquisition process. This chapter is intended to act as a reference which provides another measure for interpreting and enhancing the validity of research findings.

Literature Review (Chapter II)

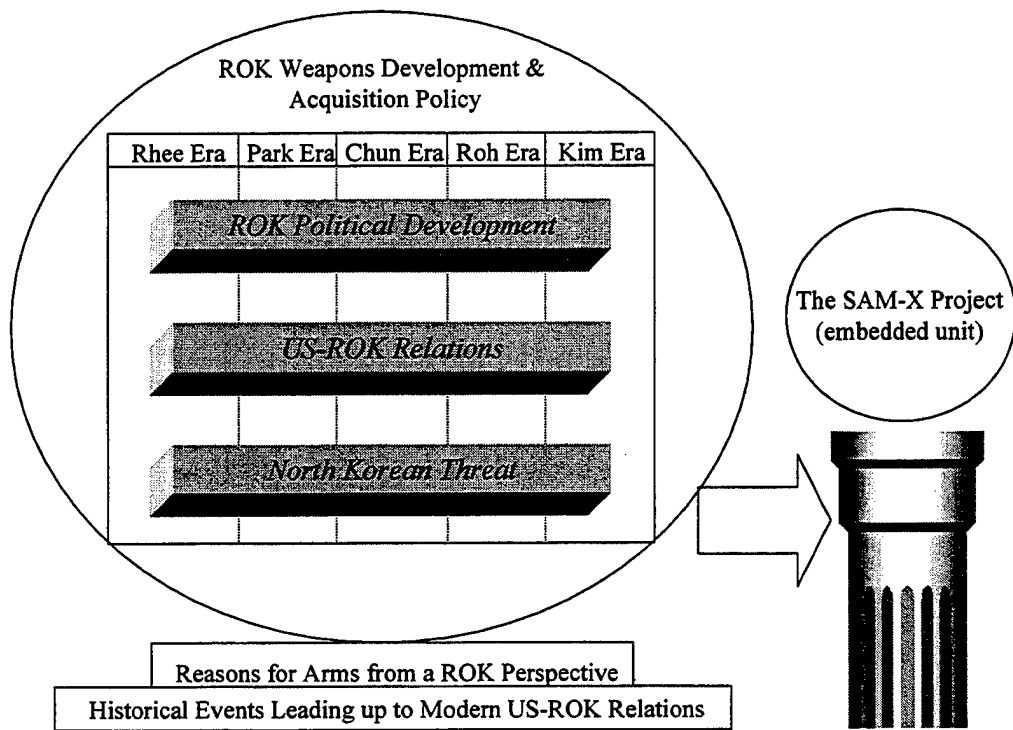


Figure 3. Components of the Research Design (Literature Review Structure and the Embedded Unit of Analysis)

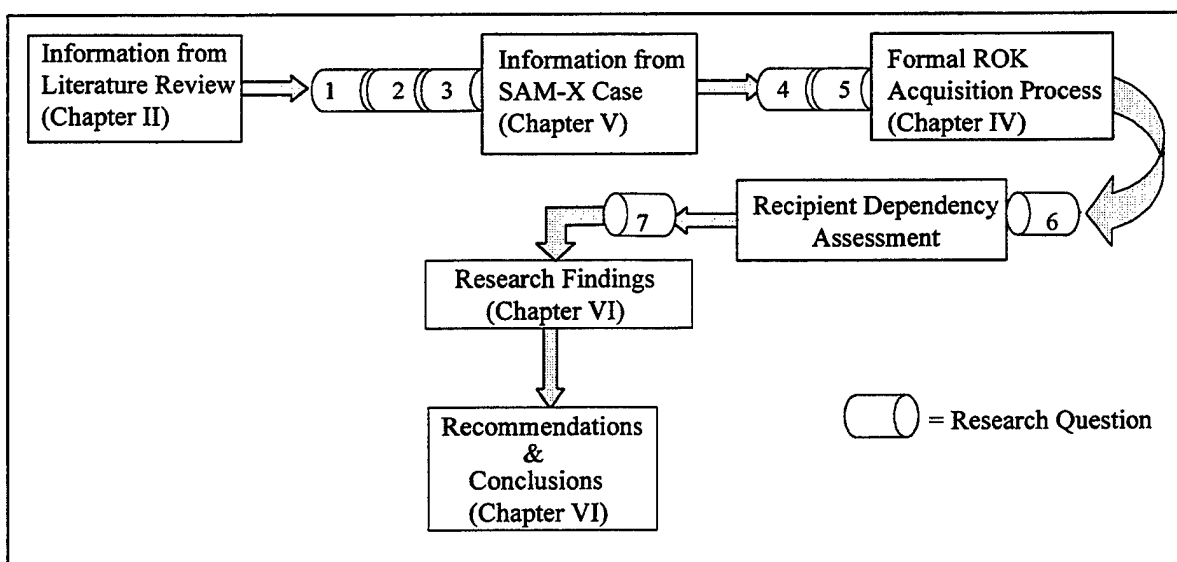


Figure 4. Thesis Research Design Component (Criteria for Interpreting Research Findings)

Reliability and Validity

In addressing the issue of reliability and validity, Vockell explains, "Reliability addresses the question of whether or not a measuring instrument is consistent. Validity addresses the question of whether or not a measurement technique is really measuring what it purports to be measuring" (27:22, 46). According to Vockell and Asher (reported by Pomerleau), "Reliability in qualitative research means that the data collection process is not self-contradictory, rather, the data collection is both consistent and stable. Validity means that the observation, interviews, or content analysis really contain the information that the researcher thinks they contain" (28).

There is little doubt as to the critical nature of reliability and validity, and its importance as part of the research process. However, in the area of qualitative research designs, the application of reliability and validity appear to be dealt with cautiously.

Miles and Huberman provide the following explanation:

Qualitative data are the source of well-grounded and rich descriptions with which one can preserve chronological flow, assess local causality, and derive fruitful explanations. [However], the problem is that there are no canons, decision rules, algorithms, or even any agreed-upon heuristics in qualitative research to indicate whether findings are valid and procedures robust. (26:1, 230)

Wainwright makes a similar assertion, comparing qualitative and quantitative methods:

On one hand, (qualitative) methods offer an important link to some of the main concerns of sociological thought, addressing questions of power, ideology and subjective meaning. Whilst on the other hand, they may be viewed as suspect in terms of their validity and reliability, particularly when compared with the more 'scientific' methods available to the quantitative researcher. (29)

Bowen delineates the distinguishing characteristics between the two methods and offers an explanation for reliability and validity in qualitative research:

Quantitative data is collected under controlled conditions in order to rule out the possibility that variables other than the one under study can account for the relationships identified while the qualitative data are collected within the context of their natural occurrence. Both quantitative and qualitative research designs seek reliable and valid results. Data that are consistent or stable as indicated by the researcher's ability to replicate the findings is of major concern in the quantitative arena while validity of the qualitative findings are paramount so that data are representative of a true and full picture of constructs under investigation. (30)

To strengthen the research design of this thesis, two forms of triangulation were utilized: data triangulation, and theory triangulation. Patton describes data triangulation as "the use of a variety of data sources in a study," and theory triangulation as "the use of multiple perspectives to interpret a single set of data" (24:187). The data collection effort for the research effort of this thesis was performed upon the premise data triangulation. Research strategies previously discussed were intended to provide multiple avenues to explore this thesis' primary unit of analysis, ROK weapons development and acquisition policy. In support of exploring each of these avenues, data was retrieved, sorted, and analyzed.

In addition to data triangulation, the concept of employing multiple perspectives to examine a subject was also utilized. Research questions 6 and 7 offer the research design added perspectives (presented in Chapter I, page 13).

- | |
|--|
| <ol style="list-style-type: none">6. What is the current arms acquisition process utilized by the ROK?7. Has a "new" paradigm emerged which describes the relationship between the US and ROK with regard to exchange of weapons for the post-Cold War era? |
|--|

Chapter V describes the formal ROK acquisition process. In essence, the chapter is intended to act as a reference to provide a measure for interpreting and enhancing the validity of research findings. In Chapter VI, research findings will be discussed. In this chapter, answers to research questions will be examined, and conclusions and recommendations will be offered. To offer an additional perspective, and effectively round out the use of theory triangulation, three factors involving recipient dependence will be examined to answer research question 7.

Catrina presents an adapted list from Cahn's "Determinants of Supplier Influence" as a basis for identifying the main determinants of recipient dependence (31:172-173). From this list, a smaller list was compiled to examine the evolution of US-ROK weapons transactions. The determinants chosen include the following:

- (1) The degree to which a recipient perceives a real threat to its national survival
- (2) The degree of indigenous weapons production capability
- (3) Whether the recipient has alternative sources of supply

The factors, along with their respective methods of assessment are presented below (31:176, 181, 196):

Factor	Perceived Threat	Degree of Indigenous Capability	Alternative Sources of Supply
Method of Assessment	The likelihood, imminence, and magnitude of the North Korean threat will be assessed through each ROK political regime	Where possible, degree of self-sufficiency will be derived from arms transfer data based on monetary units (US dollars)	Number of different suppliers and depth of respective supply will be assessed

The purpose of assessing these factors through each ROK political regime is to root out evidence of a "new" paradigm for US-ROK relations with regard to weapons transactions, should one exist.

Chapter Summary

The focus and intent of this chapter was to explain methods used to meet the research objectives of this thesis. The chapter set out to explain the research process that was developed to gather, analyze, and interpret information regarding ROK weapons development and acquisition policy. The research process was explained to acquaint the reader with the overall research strategy, data collection process, and models used to analyze and interpret the results of this thesis. In addition, methods used to offer reliability and validity of the research effort and its findings were included.

III. Literature Review

Chapter Overview

"The historical evolution of South Korea's defense industry has been influenced mainly by the [North Korean threat], US [policy] in Northeast Asia, South Korean domestic economic and technological factors, and economic interests of the US defense industry" (32:231). From this, it can be inferred that the defense industry of South Korea has been stimulated by an impetus or perceived need and defined by its relationship, both industrial and political, with the United States. Thus, this chapter begins with a brief background summary of two foundational elements which are intended to provide a relevant backdrop for the remainder of the chapter: the reason for arms from a South Korean perspective; and historical events leading up to modern US-ROK relations.

Modern US-ROK relations are defined as formal relations which began with the formation of the Republic of Korea in 1948. The rest of the chapter will outline issues relevant to the historical development of the South Korean defense industry, from 1948 to the present. Historical development will be laid out chronologically, and examined with respect to ROK presidential regimes. Topics relevant to arms and/or defense industrial development during a particular regime will be treated under the following three headings: (1) United States foreign policy and relations with South Korea, (2) the North Korean threat, and (3) development of South Korea's defense industry and acquisition policy. The third heading takes a broad look at the ROK's defense position, vis-a-vis its needs, capabilities, and strategies during the period specified. The dynamic nature of the growth and development of the ROK's defense industry takes on various themes,

depending on the information brought forth in the era represented. For example, under some regimes the focus will be on arms imports and U.S military assistance; under others, the focus will shift to indigenous production, arms exports, and technology transfer.

Background

The Reasons for Arms from a South Korean Perspective. In his analysis on regional security in East Asia, Kim offers two basic reasons why countries such as South Korea arm themselves: "(1) they feel threatened, either in real terms or potentially; and (2) they can afford weapons both because of their economic prosperity and because weapons are cheaper and more abundant in the post-Cold War world" (33:86-87). Upon recognition of South Korea's historical past, regional neighbors, and evolution towards prosperity and democracy, Kim's hypotheses appear significantly accurate.

As a nation, Korea has a long and unfortunate history of foreign domination and exploitation. A brief historical examination of attempts by foreign invaders to usurp Korea's sovereignty should clearly illustrate a legitimately perceived need for armed defense. A Korean proverb roughly translated as, "The backs of shrimp break when whales fight" describes the plight of Korea. Sandwiched tightly between what are today the Peoples' Republic of China, Russia, and Japan, Korea served for "thousands of years as a convergence point of surrounding powers, attracting covetous attention and periodic invasions" (See Figure 5, Strategic Location of the Korean Peninsula) (2). Japan, the Mongols, the Manchus, and China's Han, Liao, Yuan, Chin, and Ch'ing dynasties had all invaded Korea at one point or another before the twentieth century (2; 34).

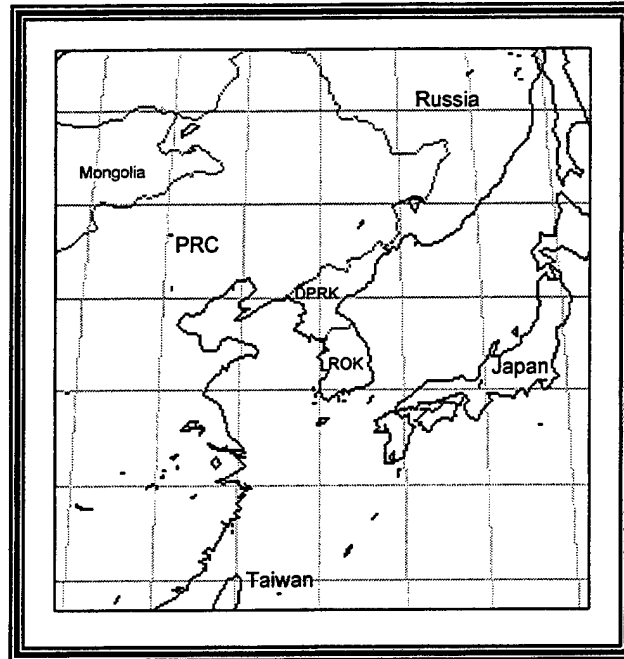


Figure 5. Strategic Location of the Korean Peninsula (35)

The twentieth century has seen the nation of Korea fought over during the Russo-Japanese War of 1904-05, annexed by Japan in 1910 and subsequently colonized until 1945. Although Korea was liberated by Russian and US forces in 1945, liberation was accompanied by immediate separation at the 38th Parallel into two halves. The two halves, North Korea and South Korea, have been pitted against each other, more or less, since 1945. Since the division of the Peninsula in 1945, there has been constant military tension between the North and South. At times, North Korea has "stepped up its military hostility through a series of bold provocations" (36:156). Thus, in South Korea's case the threat has been real, and the need to defend itself has been quite urgent at times.

Table 1, adapted almost entirely from the *Korea Herald's* "A Handbook on North Korea," lists major provocations committed against the ROK by North Korea which have occurred since the 1960's.

Today, South Korea's need for arms for a strong defense have left the skirmish sphere. North Korea is presently "capable of attacking the frontline and rear area of the [ROK simultaneously] with chemical weapons" and possibly nuclear warheads (37).

Table 1. Major North Korean Provocations Since the Late 1960s (38)

Year	Date	Description
1968	21 Jan	A 31-man commando team infiltrated into Seoul in an attempt to blow up the presidential office (29 shot to death, one captured alive, one committed suicide).
1968	30 Oct	A 130-man commando team lands on the east coast of South Korea near the cities of Uljin and Samchok (110 shot to death, seven captured alive).
1969	12 Jun	A group of armed North Korean agents infiltrate into Huksan Island off the west coast of South Korea (15 shot to death).
1970	8 Apr	Three commandos infiltrate into Kumchon, Kyonggi Province (all shot to death).
1974	15 Aug	A North Korean agent attempts to assassinate President Park Chung-hee in Seoul. Park was not hit, but the Park's wife was shot to death. The agent, named Mun Se-gwang, was arrested and later executed.
1975	11 Sep	Two North Korean armed agents infiltrate into Kochang, North Cholla Province (one shot to death).
1976	19 Jun	Three North Korean agents are shot to death while trying to infiltrate into an eastern area in the front line across the border.
1976	18 Aug	North Korean troops kill two US army officers in the truce village of Panmunjom over a tree-cutting dispute.
1979	11 Oct	Three North Korean agents try to infiltrate into the eastern front line area across the border (one shot to death).

Table 1. (Continued)

1980	23 Mar	Three North Korean armed agents try unsuccessfully to infiltrate into South Korea in an estuary of the Han River (all of them shot to death in Hwenggando, South Cholla Province).
1980	1 Dec	Three North Korean agents are shot to death in Namhae, South Kyongsang Province.
1981	27 Mar	A three-man squad infiltrates into Kumhwa, Kangwon Province (one shot to death).
1981	21 Jun	A North Korean boat with espionage agents on board is sunk off the coast of Su-san, South Chungchong Province (nine shot to death, one captured alive).
1981	4 Jul	A North Korean agent is shot to death in the upper stream of Imjin River while trying to infiltrate into the South across the river.
1982	15 May	Two North Korean agents appear on the east coast of South Korea (one shot to death).
1983	19 Jun	Three North Korean agents are shot to death in Imjin River while trying to infiltrate into the South across the river.
1983	9 Oct	North Korea commits a terrorist bombing against the visiting South Korean presidential entourage at the Aungmye Mausoleum in Rangoon, Burma (17 South Korean officials including Deputy Prime Minister Suh Sok-jun killed).
1984	24 Sep	A North Korean agent appears in Taegu and kills three South Korean citizens (the agent commits suicide).
1984	20 Oct	A North Korean espionage boat is found off the coast of Pusan. The crew evidently escaped.
1987	29 Nov	Two North Korean terrorists blow up a South Korean civilian airliner over the Andaman Sea near Burma (all of the 115 passengers and crew members killed, one of the terrorists, Kim Hyun-hee, arrested).
1992	22 May	Three North Korean agents are shot to death while trying to infiltrate into the South across the border near the western front line area.
1995	24 Oct	Two North Korean agents infiltrate into Puyo, South Chungchong Province, in an attempt to escort a returning agent (one shot to death, one captured alive).

Table 1. (Continued)

1996	17 Sep	26 North Korean commandos infiltrate aboard a submarine on the east coast of South Korea (24 shot to death, one captured alive). The UN Security Council issues a presidential statement warning North Korea.
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Kim's second hypothesis is twofold. It implies that South Korea is prosperous, enough at least to be able to procure offshore weapons outright to fulfill its security requirements. It also alludes to a newly emerged market of inexpensive Cold War era Russian weapons that are comparable to US weapons in capability and available to the ROK in the post-Cold War environment. Implicit in this hypothesis is the willingness of South Korea to consider purchasing these arms.

In terms of being a "prosperous" nation, the ROK boasts numerous economic achievements. Thirty-five years after the ravaging effects brought on by the Korean War, South Korea was center stage, hosting the 1988 Summer Olympics in Seoul.

Since launching the first Five-Year Economic Development Plan in 1962, the [ROK] economy has maintained close to [an annual] nine percent GNP growth rate. Rapid growth has been accompanied by a structural transformation from subsistence agriculture to modern manufacturing under an export-oriented industrialization strategy. (39)

In 1988, South Korea's annual trade topped the \$100 billion mark, "making it the world's tenth largest trading nation" (40). Prosperity has been achieved in conjunction with meeting national security objectives, despite constant threats and provocations from North Korea.

In March 1993, the *Armed Forces Journal International* reported that defense sales in South Korea were "no longer the nearly exclusive domain of the US." It did

admit, however, that the South Korean government still spent "75 to 80% of defense funds, in terms of offshore procurement, with US industries" (41:38). In the article, there was no mention of Russian Cold War era weapons on the horizon. At the time, the flood of cheaper Russian weapons onto the world's arms market may not have been anticipated. However, the report went on to predict that "future defense sales to the ROK would be determined not only by price and interoperability considerations, but would hinge increasingly on long-term technology transfer benefits associated with weapons [purchases]" (41:36).

In 1993, "Russia set up its state-owned military marketing corporation, Moscow-based Rosvoorouzhenie," and began targeting the countries of the Far East and Southeast Asia (42). By 1994, Russia had made itself a significant supplier of equipment and weapons to the ROK.

Since 1994, Seoul has purchased about \$250 million tanks, armored personnel carriers, and weaponry in an arms-for-debt barter deal [from Russia]. This arrangement has spurred the chagrin of US government and industry officials who emphasize the need for interoperability between the allies on the Korean Peninsula. Moreover, South Korean Air Force officials said they would include Russian SU-35 and SU-37 fighter aircraft in their estimated \$9 billion FX next generation fighter competition. (43)

The latest of the Russian offers is the S-300 air defense system that would satisfy the requirements of the ROK's SAM-X air defense project and preempt the purchase of US-made Patriots.

In summary, Kim's analytical reasoning for why East Asian countries arm themselves can be applied to the case of South Korea, and thus serves as a starting point for the remainder of this chapter. The purpose of briefly examining the historical exploitation of South Korea by her regional neighbors, as well as the ongoing threat

presented by North Korea was to substantiate, through some level of evidence, the ROK's perceived need to arm itself. An additional point made was that the ROK's evolution towards economic prosperity, coupled with an emerging market of cheaper and abundant Russian weapons in a post-Cold War environment, expands the range of options available for the ROK to arm itself.

Historical Events Leading up to Modern US-ROK Relations. Unlike the strong alliance that has characterized the US-ROK relationship for the greater part of the twentieth century, US-Korean relations began in a belligerent and disputatious manner. In 1866, an American merchant ship, the *General Sherman*, sailed to Korea to attempt to establish trade (44:148-149, 154). However, after arriving, the crew disturbed local inhabitants, inciting an attack upon the ship. The ship was burned and the entire crew was killed. In an act of retaliation in 1871, the US dispatched "several hundred marines under the Asiatic Fleet Commander, Admiral John Rogers, and fought fierce battles for a few weeks" with Korean shore defenders. About 350 Koreans were killed in the fighting; three Americans were killed. By 1882, however, Korea settled into a treaty relationship with the United States. Known as the "Treaty of Amity and Commerce between the United States and Korea," it was intended to open Korea to trade and privileges). Very little resulted from the treaty, and the United States dealt little with Korea until the Japanese surrender in World War II.

On 15 August 1945, Colonels Dean Rusk (later to become US Assistant Secretary of State for Far East Affairs 1947-1960 and US Secretary of State, 1961-1969) and Charles H. Bonesteel were ordered by the American War Department "to withdraw to

[a room with a map] and find an appropriate place to divide Korea" (45:16; 46). US General Order No. 1 called for the US to accept Japanese surrender in Korea south of the thirty-eighth parallel, and for the USSR to accept surrender north of it. The Soviets, who had arrived in Korea one week earlier and had been fighting the Japanese in Korea, went along with the terms of the order.

Earlier, at the Yalta Conference in February 1945, the future disposition of Korea had been the topic of discussion between the US and USSR. At the talks between Roosevelt and Stalin, Roosevelt suggested that (assuming the Japanese would eventually surrender) "Korea be placed under a joint trusteeship of four powers—the United States, the USSR, Great Britain, and China" (47:53-54). Two months after the conference, however, Roosevelt died, and much continuity on the matter was lost in the changeover to a new administration.

"The three-year occupation by the United States of the area approximating present-day South Korea, following the liberation of Korea from Japan, [would go on to be] characterized by confusion and uncertainty" (48). Exacerbating the "absence of a clearly formulated United States policy for Korea" was an "intensification of the confrontation between the United States and the Soviet Union, and the polarization of Korean politics between left and right." The US Army Military Government (AMG) that administered the American-occupied zone in the south was plagued with problems in dealing effectively with local people's committees. In an attempt to take control of the situation, the AMG "proceeded to disband the local people's committees and impose direct rule, [carelessly] assigning military personnel who lacked language skills and knowledge of Korea."

The US wavered on taking decisive action in Korea during the AMG period. In an atmosphere in which the AMG's effectiveness was fizzling, "the United States scuttled a plan to provide \$500 million over five years for South Korean development. [Finally, the US] submitted the Korean problem to the United Nations (UN) in September 1947" (49). By November 1947, "the UN General Assembly recognized Korea's claim to independence and made preparations for the establishment of a permanent and fairly elected government, [along with] the withdrawal of occupation forces." In May 1948, "the United Nations Temporary Commission on Korea arrived [for the purpose of supervising] the election of a national assembly." The Soviet Union, however, denounced the UN resolution, refusing "to admit the commission into the Soviet-controlled zone in the north." By this point, the prospect of two separate Korean regimes was beginning to develop.

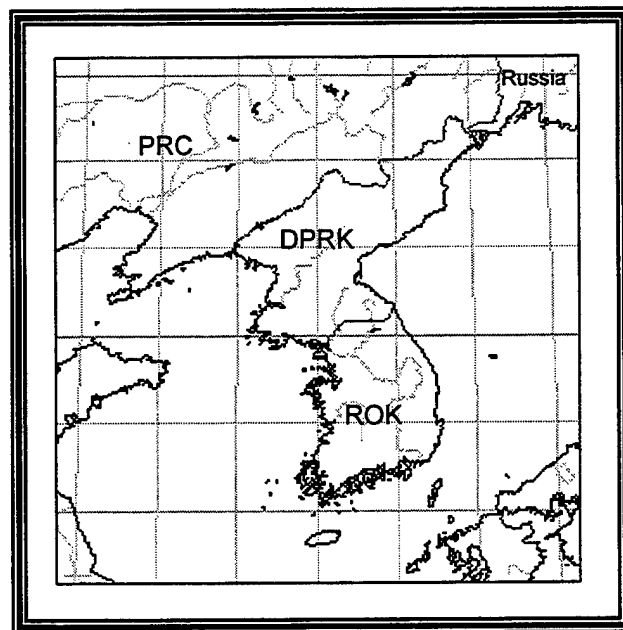


Figure 6. Divided Korea (50)

The Syngman Rhee Era (1948-1960)

Syngman Rhee (Yi Sung-man, 1875-1965) was an active and prominent figure in Korean affairs before and after the founding of the Republic of Korea (44:190).

"Expelled from Korea [by the Japanese in 1911]," he went to the United States and was a major spokesman advocating the nationalist movement and liberation of Korea from Japan (44:322). In 1919, Korean nationalists living in Shanghai, China, organized the Korean Provisional Government (44:310-311). Dr. Syngman Rhee, who was in the United States at the time, was elected its president. Dr. Rhee had become a familiar name among US politicians of the time. In 1921, the Korean Provisional Government presented an appeal for Korean Independence to US Secretary of State Charles Hughes. "In 1933, Dr. Rhee presented two petitions for Korean independence in Geneva to the League of Nations, but his efforts bore no fruit" (44:311). Despite this, Dr. Rhee's efforts undoubtedly made a considerable impression in the United States among politicians and policy makers.

On 20 June 1948, Syngman Rhee "was elected the first president of the Republic of Korea by an overwhelming majority" (44:363). On 12 August, the US government formally recognized the Korean government, "and designated John J. Muccio as Special Representative, with the rank of ambassador, to the Republic of Korea" (44:363). Then, in an official ceremony on 15 August 1948, the Republic of Korea was proclaimed.

The regime of Syngman Rhee was immediately put to the task. "Vestiges of Japanese colonial rule," [along with] "the need to reconstruct a bankrupt economy left by the Japanese" hampered the newly formed ROK government from the outset (51). South Korean politics of the time were characterized as an incessant struggle on Rhee's part to

hold on to power, and "constitutional provisions concerning the presidency had become the focal point" (52). The ROK's constitution limited the president to only two terms; however, as Rhee's second term was coming to an end, the constitution was "amended [in November 1954] by the use of fraudulent tactics that allowed Rhee to succeed himself indefinitely." By March 1960, Rhee's Liberal Party was able to reelect the 85 year-old president only through the use of blatant force. Soon after, civil disorder erupted and Rhee was forced to resign on 26 April 1960.

US Foreign Policy and Relations with South Korea (1946-60). On 22 February 1946, Soviet expert and diplomat, George Kennan, delivered the famous "long telegram" from Moscow (53). Under the name "X," the "long telegram" was published in the July 1947 issue of *Foreign Affairs* (54:190). In it, he described the workings of Soviet society and made a policy recommendation on how the United States should deal with the Soviet Union. Fienberg cites Kennan's call for "firm containment" of the Soviet Union from "The Sources of Soviet Conduct," published in *Foreign Affairs* in July 1947. In the article, Kennan describes the Soviet threat:

...its political action is a fluid stream which moves constantly, wherever it is permitted to move, toward a given goal. Its main concern is to make sure that it has filled every nook and cranny available to it in the basin of world power. (55)

One noteworthy aspect of Kennan's views on containment was his desire for the US to clearly "determine its vital spheres of interest and choose its battles wisely" (55). Apparently, for Kennan, this meant the military-industrial powers of Europe and Japan. For the Third World, or emergent countries, however, Kennan recognized the need for giving modest aid, but was opposed to focusing too much power or resources for their

cause. From his standpoint, "alliances like the ones with Taiwan (Formosa, at the time) and the Republic of Korea were foolhardy" and doomed to certain failure. Since Kennan's recommendations were extremely influential and arguably gave birth to the US policy of containment, the strategic importance of Korea with regard to containment was not immediately accepted.

The US made immediate gains in its attempt to develop formal policy to thwart the expansionist ideas of the Soviet Union, especially in Eastern Europe, culminating in the Truman Doctrine of 1947. On the other hand, things were not developing so smoothly in the newly formed Republic of Korea. The US had become frustrated with what was considered the obstinate nature of the ROK's first president, Syngman Rhee, and by 1950, a conflict of a sort arose between US Secretary of State Dean Acheson and Rhee. US economic policy advisors were upset over Rhee's stubbornness not to raise "taxes as a means of controlling the inflation which had begun under the AMG period of rule and which continued to spiral" (47:128). In early 1950, Acheson admonished Rhee in a letter, threatening "to 're-examine and perhaps make adjustments in' the aid program to [the ROK]" (47:129). Acheson also scolded Rhee for a threat Rhee had made which would delay assembly elections unless a budget was passed. Acheson reminded Rhee that "...economic and military aid from the United States to South Korea was based on the 'existence and growth of democratic institutions in the Republic,' and this would mean holding elections on schedule according to the basic laws of the country." Rhee had already suffered a setback in 1949, when the US Congress "reluctantly appropriated only \$110 million to cover the fiscal year of 1949-1950, after the US Economic Cooperation

Administration in Korea requested \$350 million for a three-year period beginning that year" (44:481).

In January 1950, the US Congress defeated a proposed Korean aid bill, and aid plummeted to \$58 million for that year (47:129). Another rift that developed between the US and Rhee evolved out of the 1948 withdrawal of US troops (47:129-130). This left Rhee with a constabulary force of 97,000 which later became the foundation of the Korean army. When Rhee reportedly formally "asked whether the US would assist in the ROK's defense, he was told that the US wanted only to assist with economic recovery and insure internal stability." In addition, Rhee's "requests for heavy military equipment [went unanswered]."

On 12 January 1950, Acheson delivered the "perimeter" speech to the National Press Club, in Washington D.C., in which he identified Japan, Okinawa, the Philippines, and the Aleutians as being inside the "defense perimeter" of the United States (56). "Formosa and the ROK were [excluded from] the perimeter."

"By June 1950, North Korean forces included ten infantry divisions, one tank division, and one air force division, and numbered between 150,000 and 200,000 troops" (57). Soviet equipment of all types, including "automatic weapons, T-34 tanks, and Yak fighter aircraft [had poured into] North Korea in early 1950." At the start of the Korean War, South Korean forces consisted of an "army of less than 100,000 men," and were less organized and poorly equipped, "lacking in tanks, heavy artillery, and combat [aircraft]." When war broke out on 25 June 1950, North Korea overwhelmed the South Korean army, and the city of "Seoul fell within three days."

Surprisingly, and most likely unforeseen by the North Koreans, the United States acted swiftly to commit forces in support of South Korea, with President Truman ordering the use of US planes and naval vessels against North Korean forces on 26 June (57). By 30 June, US ground troops were dispatched. Fearing that inaction in Korea could be perceived as appeasement of communist aggression elsewhere around the globe, the United States asked the UN Security Council to intervene in the war. Ending with a cease-fire agreement signed at P'anmunjom, on 27 July 1953, the war involved both China and the Soviet Union, which had deployed air force divisions to Manchuria in support of North Korea and had equipped the Chinese and North Koreans with weapons, supplies, fuel, food, and medicine. In addition to US forces, 15 members of the United Nations would contribute armed forces and medical units in support of South Korea. The war reduced most of the peninsula to rubble, and casualties were enormous on both sides (See Table 2).

Table 2. Korean War Casualties (44:377-378; 45:200-201)

COUNTRY	CASUALTIES	DEATHS
US Forces	157,530	33,629
South Korean Forces	257,000	47,000
South Korean Civilians	Over 1,000,000	244,000
Other UN Forces	14,000	3,194
North Korean Forces		500,000
North Korean Civilians		Over 2,000,000
Chinese Forces		900,000

Hostilities came to a halt on 27 July 1953, when "military commanders of the North Korean Army, the Chinese People's Volunteers, and the 16-member-nation UN Command (UNC) signed an armistice agreement" (58). Interestingly, "neither the United States nor South Korea is a signatory of the armistice, [although] both adhere to it through the UNC." A result of the armistice was the creation of a zigzagging three mile wide demilitarized zone (DMZ) across the Korean Peninsula that replaced the 38th parallel as the national boundary between the two Korean states. Since the 1953 armistice was signed, "no comprehensive peace agreement has replaced it; thus, a condition of belligerency still technically exists on the [Korean] peninsula."

Shortly after the armistice was signed, the United States and South Korea signed the Mutual Defense Treaty on 8 August 1953 (1:34). The purpose of the treaty, which actually came into effect in 1954, was for the United States to demonstrate its commitment "to maintaining peace and stability on the Korean Peninsula and help the Republic of Korea defend itself from external aggression" (58). Article III of the treaty stipulated that "both signatories would act to meet the common danger" in the event of an armed attack on one of the parties (1:34). "Article IV provided the basis for stationing US military forces in South Korea for common defense." According to Nahm, the Mutual Defense Treaty did not guarantee unconditional military action on the part of the United States on behalf of the security of the ROK. "Unlike the NATO agreement or the US-Japan Mutual Defense Treaty, the implementation of the US-Korean Mutual Defense Treaty required the advice and consent of the US Senate" (44:432). Article III stipulated that each party would act to meet the "common danger," but "in accordance with [respective] constitutional processes."

The United States' policy on military assistance was formalized in the Mutual Security Act of 1954, shortly after the Korean War armistice was signed. Anthony cites a portion of the act that would help define the beginnings of the US-ROK arms relationship:

Under the Mutual Security Act of 1954, "The President is authorized to control, in furtherance of world peace and the security and foreign policy of the United States, the export and import of arms, ammunition and implements of war, including technical data. The President is authorized to designate those articles which shall be considered as arms, ammunition, and implements of war, including technical data. (77:184-185)

The North Korean Threat (1953-1960). When the actual fighting of the Korean War stopped, both sides were undoubtedly exhausted by three years of combat and terrible destruction. However, there were lasting fears on both sides that the war could "resume at any moment" (60:10). The aftermath of the war was characterized greatest by a "hardening of ideological and political lines between the [ROK and DPRK]." The North Korean leader, Kim Il Sung, conducted a systematic campaign, purging his political opponents, and "creating a highly centralized system that accorded him unlimited power and generated a formidable cult of personality" (60:10-11). When signs of a Sino-Soviet split in communist ideology emerged in the 1950s, although at first disturbed, Kim "learned to play off his communist sponsors against each other to his own advantage" (60:11).

Immediately following the Korean War, North Korea was mostly occupied with the task of rebuilding. To do this, it needed assistance from its sponsors, the Soviet Union and China. From 1953-56, the Soviet Union provided the bulk of assistance, while

China stationed troops in North Korea (61). During the period 1957-60, Soviet de-Stalinization measures produced tensions in Soviet-North Korean relations. China pulled its troops out of North Korea by 1958, however, increased its share of military assistance.

Through the early 1960s, North Korea resorted to subversion and sabotage against South Korea as part of its effort to unify the country under the banner of communism (62:303-304). Peacetime infiltration was commonly conducted against the South beginning immediately after the armistice in 1953. Agents sent to the south were mainly concerned with gathering intelligence and attempting to build a covert political apparatus. These attempts to destabilize South Korea, although not thought of as productive, were a prelude to more violent attempts that would be carried out throughout the 1960s.

South Korean Defense (1953-60). Following the armistice, and until 1960, South Korea can be characterized as having been extremely dependent on the United States for financial aid and military assistance. In terms of US troop presence, however, there was a steady decline, from 200,000 US forces following the armistice in 1953, to just under 60,000 in 1960 (63:21).

In essence, South Korea was almost entirely dependent upon the United States "for finance, education, weapons, supplies, and military leadership" (1:35). For the most part, the US helped create the ROK military, and would help greatly to sustain it after the Korean War. "South Korea had expanded its [army] divisions to 14, and its manpower had reached 450,000 in strength by the time the armistice was signed in 1953" (1:34). The ROK military was expanding rapidly, and it suffered from a tremendous lack of

modern equipment and leadership training. In the two years following the armistice, 1954-55, "the United States withdrew five army divisions and one marine division, leaving two infantry divisions [in South Korea]." These withdrawals were carried out in the face of strong opposition by the ROK. As compensation for the withdrawal, departing US forces turned over their equipment to the ROK army. By 1954, the South Korean military expanded again, this time through the creation of five additional army infantry divisions. Under various programs during the 1953-60 period, the US provided for the majority of military expenditures necessary to aid the ROK government in financing a rapidly expanding military. Of this support, a substantial amount came in the form of weapons grants and transfers (See Figure 7).

The Park Chung-Hee Era (1961-1979)

After Syngman Rhee was forced to step down as president of the Republic of Korea in 1960, "a caretaker government was then established, the constitution was amended, and national elections were held in June of that year" (64). A new National Assembly took over, naming Chang Myon prime minister and Yun Po-son president. The forced resignation of Rhee and establishment of a new government was a brief victory for democracy in the ROK.

The ROK suffered from numerous post-Korean War domestic and internal political problems, and the new government was unable to cope effectively. By 1960, the ROK economy had been brought to the brink of bankruptcy through unfair tax collection practices and general mismanagement of foreign aid and domestic resource programs under the Rhee regime (65). On 16 May 1961, Major General Park Chung Hee led a

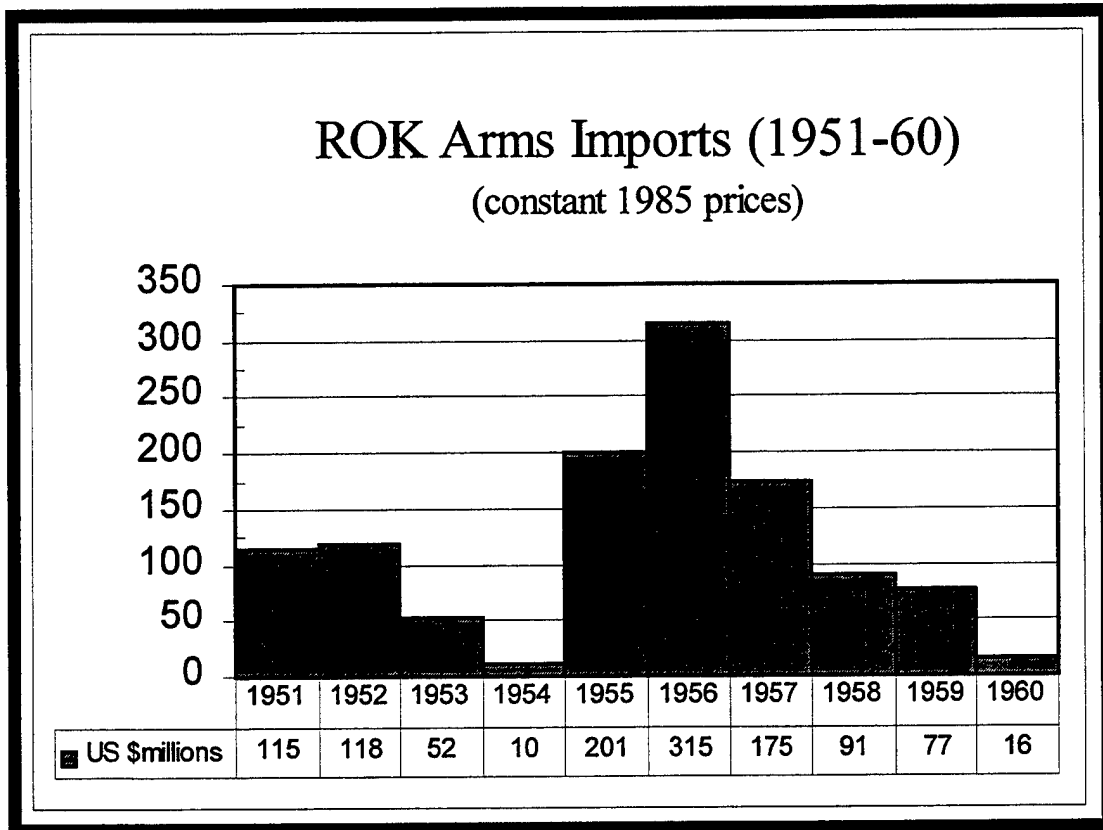


Figure 7. ROK Arms Imports, 1951-60 (66:332-333).

successful coup d'etat, and took control of the government. Immediately after taking control, the Military Revolutionary Committee announced a pledge which included "strong anti-communism, closer relations with the United States, and the establishment of a self-supporting economy (65)." "Despite an original promise to retire from politics" (65), "Park, who had retired from the army, was elected president in 1963, and was reelected in 1967, 1971, and 1978" (64).

Although Park's tenure is generally characterized as a period of tight-fisted, repressive rule and tremendous dependence upon the United States for aid and military

assistance, the ROK enjoyed many successes under his rule, including rapid economic growth, strides in the sophistication and influence of ROK foreign diplomacy, advancements in the military, and the initial development of an indigenous defense industry.

"Park's model for economic development was the highly successful postwar Japanese system" (60:34). Park established an Economic Planning Board in 1961 to provide central government direction for the economy. "In 1965, Park normalized relations with Japan, bringing in an immediate Japanese assistance package of \$800 million" along with invaluable Japanese investment and business ties. The ROK's "per capita GNP went from \$87 in 1962 to \$1,503 in 1980, with exports rising by 32.8 percent a year from \$56.7 million in 1962 to \$17.5 billion in 1980" (65). In addition to economic growth, the ROK made improvements in their military capabilities. Some of these improvements came as a result of the ROK's direct experience in the Vietnam War.

In line with economic and military improvements during the Park years was the nurturing of a defense industry (67:131). Policies and measures affecting defense industrial development implemented under Park would continue to evolve. "Support for defense industries was related to [Park's economic policies] in the 1970s of fostering investments in machinery, shipbuilding, steel, and electronics." Growth in these domestic industries paved the way for export and "provided linkage to defense production, as the manufacture of weapons became integrated into the broader production of heavy machinery and ships."

Extraordinary economic growth did not come without a price, however. Despite some of Park's successes, the ROK was experiencing political growing pains in the areas of democracy and freedom of expression.

People began criticizing the harshly repressive measures of the Government. There was also criticism of the injustices perpetuated in the wake of policies geared to rapid economic growth, particularly to the underprivileged. Trade union movements were severely restricted. The combination of pent-up dissatisfaction with the high-handed methods of the government and frustration in popular desire for political participation and economic redistribution led to Park's demise. (65)

After clinging to power for 18 years, Park was assassinated by his Korean Central Intelligence Chief on 26 October 1979 (65).

US Foreign Policy and Relations with South Korea (1961-1979). The reign of Park Chung Hee lasted 18 years (1961-1979). Park endured diverse and dynamic shifts in relations with the United States brought on as a natural result of five separate US presidential administrations. During the period, US policy shifted from stern and steady containment of communism to *detente*, then back to a focus on confronting communism. South Korea's focus remained fixed on improving its economy and thwarting North Korean aggression. In general, when the United States placed emphasis on containing the Soviet Union, relations with the ROK prospered.

In his inauguration speech, President Kennedy outlined his plan for thwarting the spread of communism, promising that America would, "pay any price, bear any burden, meet any hardship, support any friend, oppose any foe to assure the survival and success of liberty." Developing nations could expect America to "help them help

themselves" (68). During his presidency, Kennedy would confront communism on multiple fronts.

On 17 April 1961, President Kennedy's approved Bay of Pigs invasion of Cuba was executed. The invasion wound up being a fiasco for the administration, and the US had been "caught" meddling in "the internal affairs of a sovereign nation" (68). Also in 1961, the Soviet Union, under the leadership of Khrushchev, constructed the Berlin Wall, dividing east and West Berlin. "In June 1961, Khrushchev threatened to take West Berlin under communist rule by force." Adding to the increasing communist threat was Khrushchev's order to install nuclear missiles in Cuba. Tensions increased dramatically on 16 October 1962, when President Kennedy was shown reconnaissance photographs of Soviet missile installations under construction in Cuba. Staunch diplomat efforts, coupled with threats of action brought about the Soviet's compliance in dismantling the installations and ridding the island of nuclear missiles. In addition to confronting communist activities in Europe and Cuba, President Kennedy chose to support the South Vietnamese in their efforts to end a growing communist insurgency. By the time Lyndon Johnson was sworn in as president on 23 November 1963, "16,700 American troops had already been committed to the unstable and unreliable government of South Vietnam" (69). America's involvement in Vietnam would further deepen during the Johnson administration, until it was ultimately inherited by the Nixon administration.

South Korea's relations with the United States were greatly affected by the US preoccupation with Vietnam and the containment of communism during the period. President Kennedy had become frustrated with South Vietnamese leader Ngo Dinh Diem's failure to promote democracy, and threatened to withhold aid if Diem "did not

institute democratic reforms" (68). This may have influenced Park's decision to retire from the military and run for office as a civilian. His methods of going about the election may have been in question, and his ties to the military undoubtedly remained strong; nevertheless, a civilian government was re-established in the ROK.

As involvement in Vietnam became more extensive for the US, military aid for South Korea began to drop off, and "advanced military equipment that had been promised to ROK forces was not forthcoming on schedule" (70:150). To make matters worse, "there were reports of US plans to possibly transfer one or more divisions of US troops from Korea to Vietnam" (70:151). "In 1965, Park sent two divisions of Korean troops to fight alongside American forces in South Vietnam, for which he received Washington's gratitude and Korean firms received a major share of war production and construction contracts" (60:34). In addition, Park received assurances from Ambassador Winthrop G. Brown that there would be no reductions in US force levels in Korea (70:151).

To the dismay of the South Korean government, however, US foreign policy would change in 1969. On 25 July, during a stopover in Guam, President Nixon announced what would become known as the Nixon Doctrine (71). In essence, President Nixon used the opportunity to announce that the "United States would support democratic third world nations by providing them with financial and military aid, but not troops." By October of 1969, President Nixon appeared to be following through on his pledge. He called for both a cease fire in Vietnam along with the unilateral withdrawal of US troops. Although his overture was ignored by the North Vietnamese, Nixon gradually withdrew US troops from the conflict while continuing to provide equipment and money

to the South Vietnamese. In July 1970, US Ambassador Brown notified the South Korean Prime Minister of the possible withdrawal of one US division from South Korea and that further consultations would follow (72:61).

A year after delivering the Nixon Doctrine in Guam, "President Nixon declared that the United States would reduce military forces in South Korea by 20,000 [troops]" (32:225). On 6 February 1971, an agreement was announced by the ROK and US governments whereby US troops would be withdrawn and a force modernization program would be implemented for the ROK's armed forces (72:63). Park proclaimed a state of national emergency in December 1971, and "forced through the National Assembly a bill granting him complete power to control, regulate, and mobilize the people, the economy, the press, and everything else in the public domain" (73). The withdrawal of US troops, coupled with a historic visit by President Nixon to China in February 1972, "convinced South Korean leaders that it would be unrealistic to count on [an indefinite US presence in the ROK]" (74:24).

Park proclaimed martial law in October 1972. In doing so, "he dissolved the National Assembly, closed all universities and colleges, imposed strict [censorship of the press], and suspended political activities" (73). Park's new form of government, *Yushin* (revitalization), "allowed Park to succeed himself indefinitely, to appoint one-third of the new National Assembly's members, and to exercise emergency powers at will" (73). Park "justified his actions on the grounds that the nation must be strong and united to deal with [North Korea] and maintain its independence in a changing international environment" (60:37). US Ambassador Philip Habib, immediately recognized the situation as a move towards authoritarian government and reported it to

Washington (60:38). In his cable, Habib recommended that the US reaction to the situation be one of disassociation from the matter. Washington cabled back,

We agree with the embassy's preference for a posture of disassociation....In furtherance of this policy, we intend to refrain from arguing with the ROK in public, and seek to advance our counsel privately only where necessary and appropriate. (60:41)

Despite Washington's obvious displeasure with Park's political activities, Park continued to clamp down, issuing "Emergency Measure Number Nine in May, 1975, which made it a crime, punishable more than one year in prison, to criticize the constitution or to provide press coverage of such an activity" (73). Park's regime further appalled its US ally through the brutal abduction of Kim Dae Jung, Park's opponent in the 1971 ROK election (and, as of this writing, current president of the ROK). On 8 August 1973, Kim was kidnapped in a Tokyo hotel by the Korean Central Intelligence Agency, bound, and placed aboard a ship, apparently to be dumped overboard out at sea (60:42-43). Upon learning of the situation, Ambassador Habib bluntly told Park's highest government officials that there "would be grave consequences for relations [between the US and the ROK] if Kim did not turn up alive." Five days later, Kim appeared in Seoul, spoke of his ordeal publicly, then was placed under house arrest.

In the early 1970s, top-level government meetings began in Seoul to explore ways in which US support for South Korea could be sustained (75:27). At the time, President Park had realized that, in addition to radically re-thinking its commitments with its Asian allies, the United States was moving towards a slow defeat in Southeast Asia. "As a result, elaborate plans were created to attempt to influence various levels of American society." On 24 October 1976, controversy in US-ROK relations erupted after *The*

Washington Post reported that a Korean agent, Park Tong Sun, had distributed as much as \$1 million a year in bribes to Washington officials and members of Congress, and that "US eavesdropping devices had recorded the bribery scheme" (60:92). By the end of President Carter's first year in office, "four full-scale congressional investigations of [South] Korean activities were under way," and although only one member of Congress was actually convicted in the "Koreagate" scandal for bribery, the impact on US-ROK relations was severe. Oberdorfer quotes Robert Rich, State Department country director for Korea, as saying, "By the Spring of 1978, Congress probably could not have passed a bill stating that Korea was a peninsula in Northeast Asia" (60:92). During the ordeal, the US and ROK also squared off over the issue of having the former ROK ambassador to the US, Kim Dong-jo, provide testimony on the matter. Congressional pressure to make him testify brought on angry feelings by the South Korean government, which argued that the US did not respect the ROK's sovereignty (75:28-29). Although a compromise was reached when the ambassador "resigned his post and submitted answers to the questions in writing, bad feelings remained on both sides."

In addition to "Koreagate," Park's steady crackdown on political opponents and student, intellectual, and religious dissidents further hampered relations with the United States. Since implementing the *Yushin* constitution in 1972, Park repeatedly used authoritarian measures to quell opposition to his rule. Eventually, an incident occurred which caught the attention of both the US and the international community. On 1 March 1976, a group of liberals deliberately violated a government order when they gathered at the Myong Dong Catholic Cathedral in Seoul and called for the restoration of a democratic constitution (75:18-20). The ROK government responded by making mass

arrests. Included among those arrested and later convicted was Park's arch-rival, Kim Dae Jung. "During the 1976 presidential campaign, [some] individuals close to Carter's candidacy implied that future US-[ROK] relations would hinge on Park's willingness to undertake political liberalization," and ease up on his opponents. The persecution of the Myong Dong Cathedral group became a focal issue of Carter's campaign on human rights. After Carter was elected, the human rights issue was a sticking point between the US and the ROK, with the US repeatedly urging a liberalization of policies be implemented by Park's government. Carter's emphasis on human rights was also visible in his arms sales policy, announced on 19 May 1977. Among the basic guidelines set forth was a statement stipulating,

An effort would be made to promote respect for human rights in recipient countries, and the economic impact of arms transfers to countries receiving US economic assistance was to be considered. (76:11)

During his campaign, President Carter had advocated the pullout of US troops from South Korea. On 9 March 1977, he announced a plan during a press conference to "withdraw all 33,000 US ground troops within a four-to-five year period" (70:157). Members of Congress and leaders in the military had become alarmed over a reported military buildup begun by North Korea, however, and expressed serious misgivings over the pullout (70:157; 75:51). As it turned out, President Carter abandoned the plan, and pledged to have the issue re-visited in 1981 (75:51). The 1970s was a difficult decade in US-ROK relations. By the mid-70s, Park was mired in increasing domestic problems, worsening relations with the United States, and an ever-developing threat from North Korea.

The North Korean Threat (1961-79). "The foundation for the North Korean military was laid shortly after the armistice was signed in 1953" (77:280-281). The territory of North Korea was endowed with numerous natural resources, and the Japanese occupation left behind a vast industrial infrastructure. Therefore, with help from China and the Soviet Union, and a determined national commitment, North Korea was able to develop a strong industrial base capable of supporting "a sizable military structure." Under the banner of *juche* (self-reliance), the North Korean leader, Kim Il-Sung, concentrated much effort towards building a sizable military during the period. In addition to developing his conventional military forces, he put emphasis on subversion tactics and directing guerrilla actions against South Korea.

Starting in the mid-to-late 1960s, Kim began a series of provocations that was aimed at intimidating and destabilizing the ROK (See Table 1). In 1967, more than 500 incidents were provoked by the North Koreans along the Demilitarized Zone (77:281). The raids peaked in 1968, with more than 600 reported infiltrations committed by North Korea, including an unsuccessful attack on the Blue House in Seoul, and an infiltration of more than 120 commandos off the east coast (62:304). In 181 of those incidents, "17 US and 145 South Korean military personnel were killed and 294 were injured" (78). In addition to brazen incidents committed against the ROK, North Korea has also had several serious run-ins with the United States. Again in 1968 (23 January), the North Koreans attacked, then captured the US Navy's intelligence vessel, *USS Pueblo*, along with its crew of 83 in international waters. The surviving 82 crew members were imprisoned for 11 months in North Korea before being released back to

the US (79). On 15 April 1969, Kim Il-Sung's birthday, the North Korean Air Force shot down a US Navy RC-121 over waters off North Korea's east coast, killing all 31 crew members (78).

In the 1970s, Kim placed less emphasis on commando raids, and turned towards building up his military forces. Through the 1960s, South Korean forces outnumbered North Korean forces, but by 1979, the DPRK had reached parity with the ROK (See Figure 8) (77:283). In addition to building up conventional forces, Kim looked for other means to intimidate the ROK.

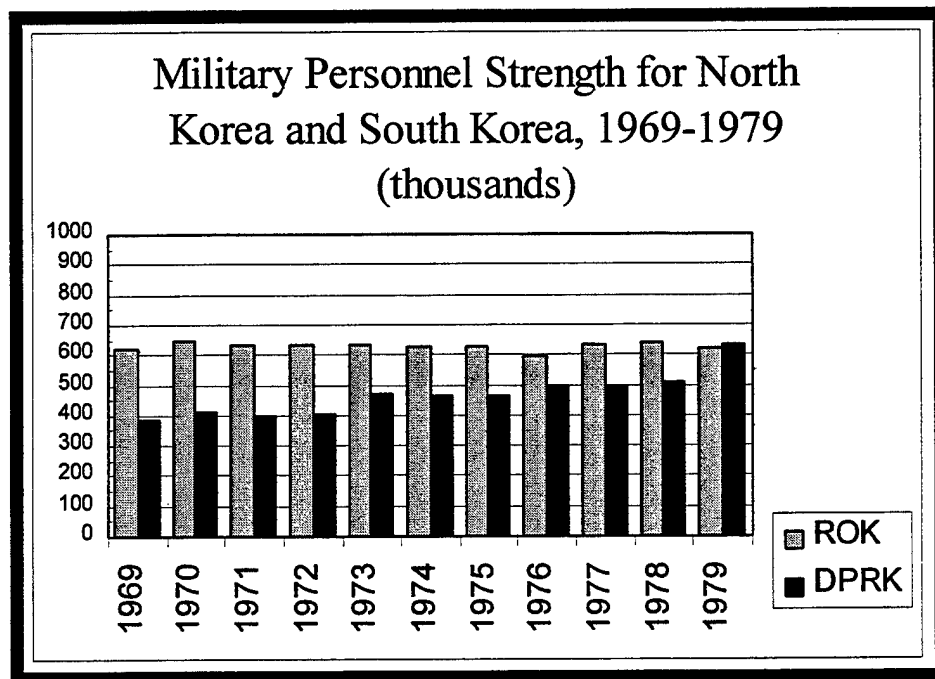


Figure 8. Comparison of Military Personnel Strength (77:284)

On 15 August 1974, an attempt was made to assassinate President Park during a speech he was giving at the National Theater in Seoul (60:51-55). The would-be assassin, 22-year-old Mun Se Kwang, from Osaka, Japan, misfired his .38 caliber pistol,

however, and ended up killing Park's wife, Yook Young Soo. Mun later admitted being instructed and assisted by an official of the North Korean residents association of Japan.

After a twenty-month hiatus in border clashes, ROK forces exchanged fire with a North Korean guard post on 15 November 1974, after a South Korean soldier discovered a secret tunnel in the southern part of the demilitarized zone (DMZ) (60:56-59). The ROK soldier thought it might be a hot spring, and poked it with his bayonet, drawing fire from the nearby guard post. In February 1975, a second, much larger tunnel was found. This one started at the base of a mountain three-fourths of a mile into North Korean sovereign territory, and ended three-fourths of a mile into the South Korean side of the DMZ. After inspecting it, the US Command estimated that the tunnel "could accommodate 10,000 men per hour with light artillery and other supporting weapons." Two similar tunnels were later found, one in 1978, and the other in 1990.

The most explosive, and perhaps most bizarre act of North Korean aggression occurred on 18 August 1976 (60:74-75). A ten-man US-ROK security detail, along with five South Korean workmen, led by Captain Arthur Bonifas, gathered around a poplar tree in an area near the western edge of the Joint Security Area (JSA) in P'anmunjom. The detail's objective was to simply trim branches off the tree that had begun to "obstruct the view between two US-ROK manned guard posts within the JSA." As the detail began their work, two North Korean officers and nine enlisted men approached the area. Within minutes, fighting broke out, and the North Koreans, using fists, clubs, and axes they seized from the security detail, murdered Bonifas and another US officer, Lieutenant Mark Barrett. US reaction, although not punitive, was extremely decisive. Three days after the killings, Operation Paul Bunyan commenced:

At seven A.M. on 21 August...a convoy of twenty-three American and South Korean vehicles rolled into the JSA without warning. Aboard was a sixteen-member US engineering team with chain saws and axes, who immediately began working on the massive trunk of the poplar and also removing two unauthorized barriers that had been erected in the JSA by North Korea. They were accompanied by a thirty-man security platoon armed with pistols and ax handles, and sixty-four ROK Special Forces *tae kwon do* experts. Hovering overhead with a noisy whirl of rotors was a US infantry company in twenty utility helicopters, accompanied by seven Cobra attack helicopters. Behind them on the horizon were the B-52 bombers, escorted by US F-4 fighters and ROK F-5 fighters. Waiting on the runway at Osan Air Base, armed and fueled, were the F-111 fighter-bombers. The *Midway* aircraft-carrier task force was stationed offshore. On the ground at the approaches to the DMZ were heavily armed US and ROK infantry, armor, and artillery backup forces. (60:80-81)

Incessant provocations from the DPRK were effective in the sense that they forced Park to increasingly restrict social and political freedoms, which in turn, increased levels of social discontent. Park took DPRK provocations very serious, fearing that social disorder brought on by DPRK antagonism could potentially lead to wide-scale chaos, and ultimately invite a North Korean attack. Adding to Park's concerns was what appeared to be shifting US foreign policy. The US inability to cope with the Vietnam War and the announcement of the Nixon Doctrine signaled a new pattern of foreign policy for the US. The escalating threat from North Korea, coupled with a US policy which took on the appearance of partial disengagement from Asia, planted an urgent sense within Park to begin exploring the realm of military self-sufficiency. Thus, by the early 1970s, South Korea established the beginnings of what would evolve into the beginnings of an indigenous defense industry.

South Korean Defense (1961-79) and the Beginning of the ROK's Indigenous Defense Industrial Capability. Until the late 1960s, there was no real attempt to develop an arms industry in South Korea. ROK dependence on US military aid continued to

characterize the relationship. Arms imports through military assistance from the US made up the vast majority of the ROK weapons acquisitions during the 1960s

(See Figure 9).

After the Korean War, although the succeeding government had emphasized the need for strong indigenous military forces, South Korean dependence on the United States had remained immense. Modern weaponry and tactics of the United States had not been familiar to the ROK military and the equipment of the forces had not been their own. The material, technological, and psychological dependence on the United States military was profound. (1:36)

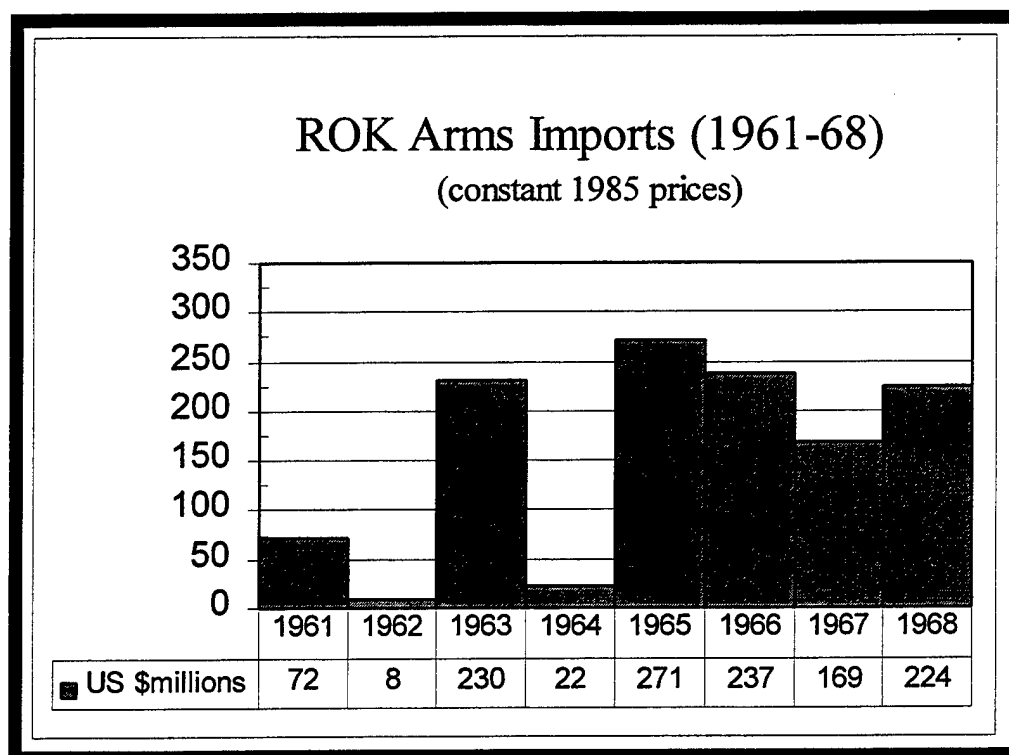


Figure 9. Weapons Imports by South Korea, 1961-68 (66:332-333)

Many factors would eventually help steer the ROK government towards developing policy that would foster the establishment of a defense industry: ROK

economic policies, ROK participation in the Vietnam War, continued North Korean incursions, and shifting US foreign policy decisions. As previously discussed, North Korean commando raids and bold military aggression directed towards the United States would signal a need for President Park to explore a domestic defense production capability. The Nixon Doctrine and planned US troop withdrawals would heighten Park's anxieties over US commitment, seemingly leaving no other option but self-sufficiency. The ROK would need either the ability to produce the goods or procure them outright, or both.

From 1962 through 1978, "[South] Korea's real gross national product increased at an annual average rate of nearly 10 percent," and the ROK was transformed from a typical developing country to that of a moderately industrialized nation (80:114). Beginning in 1962, President Park began what would evolve into a series of five-year plans designed to guide the economy through industrialization, ultimately paving the way to international industrial export markets and self-sufficiency. The First Five-Year Economic Development Plan (1962-66) primarily blueprinted the initial steps toward the building of an industrial infrastructure that was neither consumption-oriented nor overly dependent on oil. The Second Five-Year Economic Development Plan (1967-71) emphasized upgrading the industrial infrastructure and rapidly building capital-intensive import-substitution industries, including steel, machinery, and chemical industries (62:144). Industrial deepening in the capital-intensive sectors would permit the ROK to absorb technologies that would later be transferred from the United States and also provide the indigenous structure necessary to begin taking on industrial production

of weapons (81:246). Thus, in 1968, President Park indicated that the ROK was ready to open bidding "in the world market for an ammunition and rifle factory" (32:225).

South Korea's participation in Vietnam would also factor into the ROK's economic and defense industrial equation. Nearly 50,000 ROK troops served in Vietnam, and ROK forces gained the reputation of "successfully reducing enemy-initiated activity in their assigned areas" (1:36). Involvement in the war would give South Korea some degree of leverage in the bargaining process with the United States. As a reward for the ROK's involvement, the US agreed to the following:

1. To provide over the next few years the complete equipment for three newly established divisions and to expedite the modernization of 17 army divisions and one marine division in South Korea.
2. To provide all equipment including weapons to the forces deployed in Vietnam and finance [sic] to relieve any financial burden on the South Korean budget.
3. To improve the ROK anti-infiltration capability.
4. To provide necessary equipment to expand the ROK ammunition production in South Korea, noting that a considerable portion of present ammunition supplies for the ROK armed forces were supplied by the United States.
5. To provide communication facilities for communication between the ROK government and its forces in Vietnam.
6. To suspend the Military Assistance Program for as long as there were substantial ROK forces in Vietnam, and to purchase South Korean products, supplies, services and equipment in US dollars, not American products [sic], for the use of ROK forces in Vietnam in order to increase the South Korean foreign currency reserve.
7. To buy goods for rural construction, pacification, relief, logistics and so forth for use in South Vietnam from South Korea.
8. To provide South Korean contractors expanded opportunities to participate in the various construction projects undertaken by the United States in South Vietnam.

9. To provide additional AID loans to South Korea.

10. To expand technical assistance to the ROK to support export promotion and to provide a \$15 million program for the support of South Korean exports to South Vietnam. (1:36-37)

Overall, the "US spent \$927 million to support the South Korean forces in Vietnam from 1965-70" (1:37). In addition, it was estimated that South Korea "earned an extra \$546 million from 1965-69 through military commodity procurement, war risk insurance premiums, contracts for services and construction, military and civilian personnel remittances, and commercial exports."

On 19 January 1970, President Park "emphasized the need to develop South Korea's defense industry [after an inspection of] the Ministry of National Defense (MND)" (82:155). Initial emphasis included "basic weaponry to arm the homeland reserve force, a production system that centered on civilian firms' production of vehicles and gunpowder."

President Park's plan was based on five principles: (1) gradual development of the industry for the sake of long-term efficiency, competitiveness and safety; (2) establishment of a long-term plan for defense demand and government support; (3) fostering second-source firms among the civilian industry; (4) matching the defense industry plan with the overall economic and heavy-industry development plan; and (5) limiting concentration of defense production to no more than thirty percent to any one firm. (82:155)

In essence, the strategy Park laid out tied defense industrial development with the country's economic plans.

During the Park regime, the South Korean defense industry fell into two distinct phases, "the Force Modernization (MOD) Plan (1971-75), and the Force Improvement Plan (1976-80)" (81:247). During the MOD plan period, the ROK government began to

"allocate investments into defense-related research and development," and in 1970, created the Agency for Defense Development (ADD).

The ADD was commissioned not only to serve as a defense-related technical data center and to assist the private sector's defense-related R&D, but also to acquire foreign defense technology and engage directly in defense product development. (81:247)

The ADD would play an important role in implementing goals that were established in the ROK's Third Five-Year Economic Development Plan (1971-76).

Under the Third plan, the ROK sought to shift its emphasis from "labor-intensive, light manufacturing sectors, to capital intensive, heavy chemical industrial sectors" (81:249).

For the defense industry, "the Third Five-Year Plan focused on reverse-engineering of imported weapons, [development of basic weapons], and licensed production in support of conventional weapons development" (82:156). With technical information provided by the US, the ADD developed production processes and disassembled and reverse-engineered weapons already in their possession. To assist the ROK with implementation of the MOD plan, the United States pledged \$1.5 billion worth of assistance to begin in 1971 (1:39). Thanks largely to this US assistance, by 1977, the ROK had acquired "200 tanks, 100 armored personnel carriers, 250 artillery pieces, 90 combat aircraft, 165 other military aircraft, 150 antiaircraft guns, and 20-30 naval vessels" (1:39).

The 1970s would be significant in marking both the beginnings of the ROK defense industry and an arms export strategy, as well as the period in which the ROK freed itself from complete dependence upon the US for support. Although US arms imports would remain steady through the 1970s, slightly increasing towards the end of

the Park era, cash purchases for US arms by the ROK would exceed the value of US aid for the first time. (See Figure 10 and Tables 4 and 5).

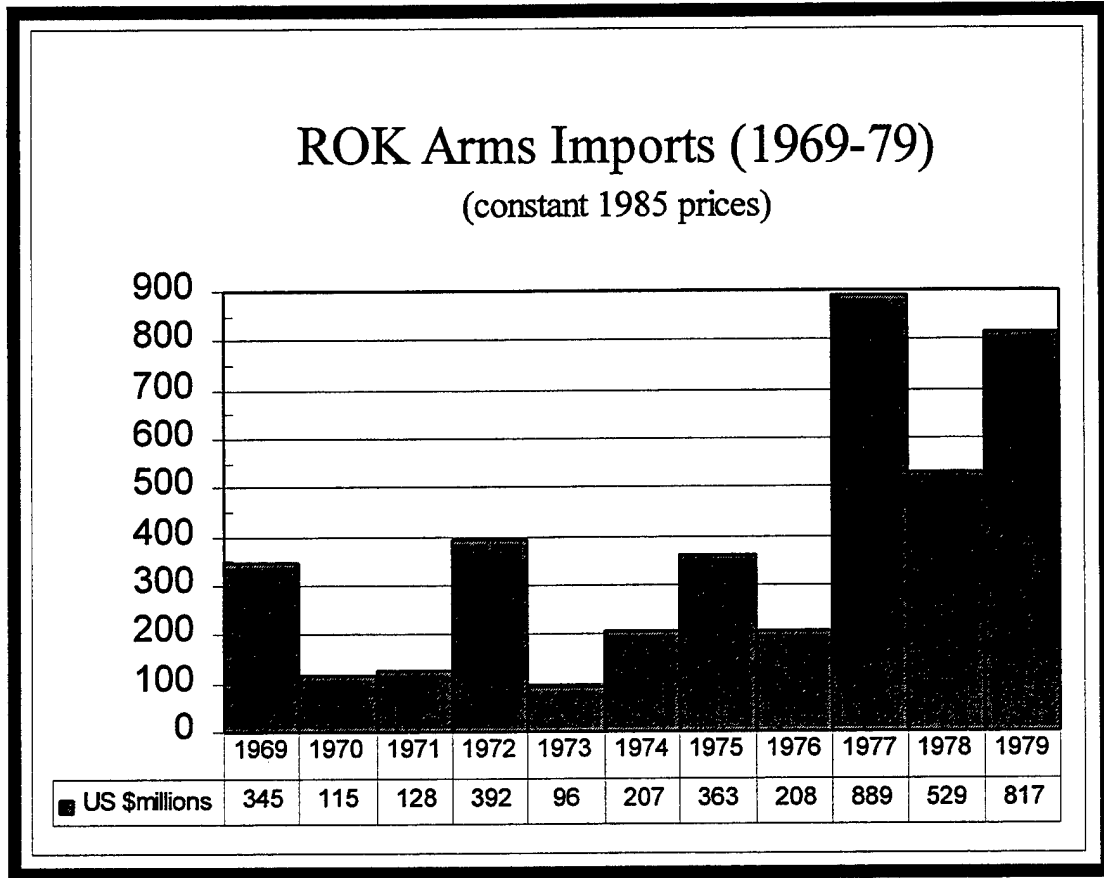


Figure 10. ROK Arms Imports, 1969-79 (66:332-335)

Significant indigenous production began in the ROK in the early 1970s. "In 1971, the ROK Army Arsenal began the licensed production of the [Colt Firearm Company's] M-16 rifle" (82:156). Earlier, the ROK had indicated a desire to acquire AR-18 rifle production rights owned by the Armalite Company and Stoner weapon system rights owned by the Cadillac Gage Company, in addition to Colt M-16 production rights (1:39). However, it was "under pressure from the US Department of Defense that only Colt

Firearm finally agreed to make a contract with South Korea, [granting the rights] to produce 600,000 M-16s, parts, and ammunition." This number had been specified in a memorandum of agreement executed between the United States and ROK which "authorized production of enough rifles to supply South Korean army units" (4).

Another initiative under the Third Five-year Plan was the establishment of additional facilities at civilian industrial firms.

Domestic automobile, machine, and shipbuilding companies equipped themselves with facilities to produce designated items. The Presidential Secretariat was instructed to oversee decision making in the defense industry and the heavy chemical industry to fortify the contribution that heavy commercial industry could make to defense production. (82:156-157)

As a way to help foster growth in the newly emerging ROK defense industry, "in 1973, the government enacted the Provisional Law for the Promotion of Military Supply" (32:225, 227). The law granted long-term, low-interest loans, tax exemptions, and other incentives to firms producing defense-related items. On 19 April 1973, President Park outlined a separate Eight Year Defense Plan, named the *Yulgok* Project, which was intended to "reduce foreign dependence through domestic production of conventional weapons" (82:157). In 1975, a special defense tax was created to further finance defense industry related goals for the period (1:40).

By the mid-1970's, South Korea signed several licensed production agreements and began producing "many types of US-designed weapons, including grenades, mortars, mines, and recoilless rifles" (4). These agreements were executed with "the same stipulations as those for the M-16s." A noteworthy endeavor that involved a Korean-American concern in the early 1970s was Korea-Tacoma. Korea-Tacoma has taken on "the bulk of the construction of the smaller categories of warships" under the country's

naval program (83:6). The ROK selected Tacoma Boatbuilding Co., of Tacoma, Washington, in the early 1970s after "surveying overseas naval yards for fast attack craft designs" (83:6). The ROK initially purchased "four missile attack boats (PSSM 5 class) from Tacoma, but subsequent purchases of four PSSM 5s and five (CPIC patrol boats) were made from Korea-Tacoma, in South Korea." In addition to licensed production, the early 1970s also saw the start of a technical data flow from the US to the ROK

A total of 881 free technical data packages (TDP) were transferred to South Korea, mainly from the United States, to support security in the early 1970s. About fourteen percent of them (124 cases) were used by the Korean defense industry to establish a domestic production base for conventional weaponry. From 1980 on, however, the US suspended the supply of free TDPs, in defense of the intellectual property rights of the US manufacturers. (82:160)

Table 3. Major ROK License/Co-Production Programs of the 1970s (84:237)

SYSTEM	LICENSER	KOREAN PRODUCER
CPIC Patrol Boat	US	Korea-Tacoma
LCU-1610 Landing Craft	US	Hyundai
M-16 Rifle	US	State Arsenal
M-101 Howitzer	US	Kia
M-104 Howitzer	US	Kia
MD-500	US	Korean Air
Mulgae-class Landing Craft	US	Korea-Tacoma
PL-2 Trainer Plane	US	ROK Air Force
PSMM-5 Fast Attack Craft	Italy	Korea-Tacoma

The follow-up to the MOD Program was the Force Improvement Plan (FIP) (1976-1980). The ROK had already embarked upon this program, when President Carter declared his plan for withdrawal of US forces from South Korea, in May 1977 (1:40). In response to this announcement, President Park increased efforts to develop the ROK's defense industry. At the initial defense industry promotion conference held on 17 June 1977, Park personally directed his cabinet, military staff, and twenty-five representatives from the defense industry to achieve, by the end of 1980, the establishment of a "defense industry to a nearly comprehensive spectrum of weapons and self-supporting level, except in the areas of aircraft and certain types of highly sophisticated electronics arms" (32:227-228). The FIP was pursued "in parallel with the Fourth Five-Year Economic Development Plan (1977-1981)." During the Fourth Five-Year Plan, further linkage with the defense industry was ingrained, and "massive investment poured into the heavy machinery, iron and steel, shipbuilding, metallurgy, and electronics industries" (81:249).

In addition to mass production of basic weapons, South Korea pushed ahead with development of highly sophisticated weapons. The ROK successfully test-fired a "two-stage surface-to-surface missile" on 26 September 1978, thus becoming only "the seventh nation in the world to produce missiles" (32:228). The ADD had seen the program through its design and production stages. In December 1978, the ROK government "promulgated the Aero-Industry Promotion Law" to pursue the establishment of an aircraft manufacturing capability. In 1979, the US government approved an F-5E and F-5F jet aircraft co-production program between Northrop and the ROK. The deal included Northrop's technological assistance.

Through 1976, South Korea directed nearly all of its arms production towards meeting domestic requirements (85:85). Some defense-related items were sold during the defense industrial build-up period from 1968-76 (36:163). Defense products sold abroad during this period were mostly non-weapon supplies, such as uniforms, gas masks, tents, and some communications gear. By the mid-1970s, however, the decision was made to "move cautiously into the arms [export market], starting with non-lethal items first, then moving on to unsophisticated small arms and ammunition, and finally to more complex [systems]" (85:85). In 1977, South Korean arms exports volume totaled more than \$100 million, making the ROK a leading Third World arms-exporting country (32:229). "In 1978, Korea-Tacoma Marine Industries, Ltd., won a contract from Indonesia to produce four landing ship tanks." As the ROK was satisfying the bulk of their domestic conventional arms requirements by 1979, the development of an export market for ROK-produced weapons helped continue production at existing facilities.

By the mid-1970s, Foreign Military Sales credits extended by the United States were gradually declining, and by 1975, cash purchases by the ROK for weapons exceeded the value of US military aid (74:32). Most of the expenditure during the FIP was financed by the South Korean government, and "by the end of the 1970s, [the ROK was covering] more than 90 percent of its total defense costs" (1:40, 43). Thus, during the Park regime, the ROK began moving from total reliance on the United States to an increasing degree of autonomy, satisfying much of its own needs, and exporting surplus production to third countries, as well. Table 4 plots the ROK's course towards self-sufficiency. Table 5 contrasts US FMS, Assistance, and Commercial sales over three decades through 1979.

Table 4. US Military Assistance and ROK Defense Expenditures During and After MOD (in current US\$ millions) (1:40)

	1971	1972	1973	1974	1965	1976	1977
Total US Assistance	556.2	532.2	363	157.3	141.6	185.4	292
ROK Defense Expenditures	411	428	476	742	943	1500	2033
(% of ROK GNP)	5.1	4.6	3.8	4.3	5.1	6.2	6.5
U.S % of Total	57.5	55.4	43.3	17.5	13.1	11	12.6
ROK % of Total	42.5	44.6	56.7	82.5	86.9	89	87.4

Table 5. US Foreign Military Sales, Assistance, and Commercial Exports for Selected Decades (US \$millions; constant 1987 prices) (86:52)

	1950-59	1960-69	1970-79	TOTAL
Foreign Military Sales	2	7	2,129	2,138
Commercial Exports	0	0	412	412
Military Assistance	4,801	7,383	5,481	17,665
Education and Training	191	358	62	611
Total	4,994	7,748	8,084	20,826

The Chun Doo Hwan Era (1980-1987)

Following the assassination of Park Chung Hee, Ch'oe Kyu-ha, who had been premier under Park, took over leadership of the government, and was subsequently

elected president in December 1979, by the National Conference of Unification, the ROK's electoral college (87). Ch'oe had no political backing, however, and did not manage to consolidate his political base by the time Lieutenant General Chun Doo Hwan began asserting his control over the ROK military.

On 12 December 1979, Chun, who was head of the Defense Security Command and the investigating officer into the assassination of Park Chung Hee, had the army chief of staff, General Chung Seung Hwa, arrested under the pretense that Chung may have been linked to the Park assassination (60:116-117). From this point, Chun set about uprooting the power elite that remained from the Park era (87).

Chun and his closest associates (one of whom was Major General Roh Tae Woo who would later succeed Chun in 1987) served as the core of a junta committee, called the "Special Committee for National Security Measures" (67). "The committee vested in itself the authority to pass laws and make all decisions affecting the state until a new National Assembly came into being." On 27 August 1980, after promoting himself to General and then retiring from the army, Chun Doo Hwan "was elected president by the National Conference for Unification."

An event would occur shortly after Chun's power grab that would have lasting negative effects for the regime itself, and for US-ROK relations. After "university student-led demonstrations against the government [began to] spread in the spring of 1980, the government declared martial law in mid-May, banned all demonstrations, and arrested many political leaders and dissidents" (64). Under the banner of weeding out corruption, Chun zealously conducted a full-scale series of purges.

The clean-up campaign began in May 1980 when Kim Chong-p'il and others were forced to give up their wealth and retire from politics. In June some 300 senior KCIA agents were dismissed. In July 1980, more than 230 senior officials, including former cabinet officers, were dismissed on corruption charges. The ax also fell on 4,760 low-level officials in the government, state-owned firms, and banks, with the proviso that the former officials not be rehired by such firms within two years. The Martial Law Command arrested 17 prominent politicians of both the government and opposition parties for investigation and removed some 400 bank officials, including 4 bank presidents and 21 vice presidents. The government also announced the dismissal of 1,819 officials of public enterprises and affiliated agencies, including 39 (some 25 percent) of the presidents and vice presidents of such enterprises and banks and 128 board directors (more than 22 percent). (89)

Student demonstrations began on the morning of 18 May in the city of Kwangju, in defiance of Chun's new edicts (90). A crowd of university students began demonstrating in the morning, and by the afternoon, they had been joined by hundreds of additional demonstrators. When the demonstrations proved too much for city police to control, the Martial Law Command deployed a Special Forces detachment consisting of trained paratroopers capable of conducting assault missions. The Special Forces dealt harshly with those who continued to ignore the ban, sparking confrontations which left at least 200 civilians dead (64). Enraged citizens rallied in revolt, but by 27 May, the rebellion was quashed by an attack by the ROK army that took less than two hours (69).

"In October 1980, a referendum approved a new constitution" which included a "strong executive and indirect election of the president" (64). Unlike previous constitutions, the chief executive was now limited to a single seven-year term. "Elections were held in early 1981 for both a National Assembly and an electoral college. The latter then elected President Chun to a seven-year term." Chun ended martial law in January 1981, but the "government retained broad legal powers to control dissent."

Although the Chun regime was characterized by much public display of discontent, the South Korean economy continued to do quite well. "From 1982 through 1988, real GNP growth averaged 10.5 percent per year, and inflation [was relatively low]" (91). By 1988, "the current account trade surplus reached \$14.2 billion, 2.8 million new jobs were generated (since 1982), and the unemployment ratio [dropped to a mere] 2.5 percent."

Despite favorable results with the economy, the Chun government failed to win public support. He lacked political credentials, and was regarded by the people as a dictator who was depriving the country true democracy (92). In addition, the Kwangju incident would serve as an unrecoverable setback for which Chun would eventually be convicted, tried, and sentenced to death. By 1987, the Chun government came to an end, paving the way for greater political reform and reflecting the notion that the country was moving closer and closer to true democracy.

US Foreign Policy and Relations with South Korea (1980-1987). The Carter years arguably produced the lowest point in US-ROK relations since the republic's creation in 1948. The United States government had repeatedly criticized Park's dictatorial policies and attempted to implement what had been an earlier campaign pledge to withdraw United States ground troops from South Korea. The embarrassments associated with the 1977 Koreagate scandal also strained the relationship. However, with the ushering in of a new and fervent anticommunist theme by the Reagan Administration, political relations between the two countries began to improve. On 28 January 1981, Chun embarked on a ten-day trip to the United States, becoming Reagan's first official

guest in the White House. On 12 November 1983, Reagan reaffirmed his support of Chun by visiting Seoul (93; 94).

While Reagan's support for the Chun regime helped elevate Chun's stature "in domestic politics and the international arena, it [began fueling] a subculture of anti-Americanism" (93). Opposition forces in South Korea, mainly university students and political dissidents, denounced US support for the Chun regime and perceived tacit approval of the Kwangju incident as "a callous disregard for human rights and questioned US motives in South Korea." Chun's White House visit had "occurred only several months after the Martial Law Command had brutally suppressed the student uprising in Kwangju." To many people in South Korea, the US position on human rights and democracy was replaced by an expedient desire to use the ROK in its overall anticommunist posturing. Anti-American sentiment created an atmosphere that "led some of South Korea's radical elements to take extreme measures." In March 1982, arson was committed at the United States Information Service building in Pusan, and on 23 May 1985, the United States Information Service Library in Seoul was taken over and occupied by 73 university students. The students were demanding an apology from the US for its "involvement" in the Kwangju incident (94).

On 1 September 1983, the United States and South Korea were perversely bonded together in the struggle against communism when Secretary of State George Shultz "grimly announced that a Soviet fighter plane had shot down [Korean Airlines Flight 007]" (60:139). The Boeing 747 had been en route from New York to Seoul, via Anchorage, and had 269 people aboard (94). The incident exacerbated already tense

relations between Washington and Moscow, and ideas of a ROK rapprochement with the Soviet Union were indefinitely put off (60:140).

Overall, the Chun era was marked by much better political relations between the United States and Republic of Korea. However, as the ROK gained stature internationally and prepared for its job as host of the 1988 Summer Olympics, high levels of public dissatisfaction mixed with feelings of nationalism emerged. The people felt they were due greater freedoms by their government, and associated repression by the Chun regime with the United States.

The North Korean Threat (1980-1987). In an atmosphere already made tense by the Soviet shoot down of the KAL 007, "tensions between [the DPRK and the ROK] increased dramatically in the aftermath of [a North Korean] assassination attempt on President Chun in Burma" (64). On 9 October 1983, a bomb planted by North Korean military officers exploded during a wreath-laying ceremony in Burma's Martyr's Mausoleum, killing six members of the ROK cabinet (64; 60:140). Chun, whose arrival was delayed, managed to survive the attack (60:141). North Korea would follow this up on 29 November 1987 with the terrorist bombing of KAL flight 858, which was on its way from Abu Dhabi to Seoul (60:183-184). The bombing, intended to disrupt the impending Seoul Summer Olympics, killed all 115 people who had been on board.

On 12 November 1986, *The Washington Post* reported a different type of military tension that had developed between North and South Korea. The DPRK had begun construction on a large hydroelectric dam estimated to be 650 feet tall and able to hold 22 billion tons of water (95). South Korea complained that breakage of the dam by accident

or in war would cause "huge damage in the South, destroying five South Korean dams and catastrophically flooding the entire Han River area which flows through Seoul."

In addition to maintaining its conventional forces, North Korea would make inroads in the development of their ballistic missile program during the period. By 1981, "North Korea had obtained a small number of Scud-Bs from Egypt," and began work to "reverse engineer the system," resulting in the development of the Scud Mod B (96). In 1984, three missiles were successfully launched with a range of 200-250 kilometers (97:184). With financial support from Iran, North Korea began full-scale production of Scud Mod Bs, delivering 100 missiles to Iran in late 1987 (96).

In the 1980s, North Korea experimented with a few hard-hitting, high-visibility terrorist-styled attacks against the ROK in an attempt to destabilize it. With production of the Scud Mod Bs, attention was focused on the further development of delivery systems which would give the North both a significant weapon of terror and simultaneous front and rear-area attack capabilities.

Further Development of the South Korean Defense Industry (1980-87). The direction of the ROK's defense industry changed course beginning in the early 1980s. Due to "doubts over the economic efficiency of ROK domestic weapons production," privileged treatment of the defense industry was de-emphasized and an attempt was made to cultivate the ability for the industry to survive on its own (82:157-158). "Investment in research and development was reduced, and purchases of weapons and defense technology from overseas [increased]." In addition, overall responsibility for decisions regarding weaponry shifted from the Blue House, a vestige from the President Park era,

to the Ministry of National Defense. In an effort to help the defense industry survive and increase investment in US weapons technology, export of weapons to the third world was emphasized (1:44).

Some impediments to the ROK's ability to establish a robust arms export exist in third country sales restrictions that stem from the US Arms Export Control Act, and the International Traffic in Arms Regulations. In essence, these restrictions "limit the third-country sale of defense articles produced with US assistance, technical data, manufacturing licenses, and co-production by the countries receiving these services" (36:169). Essentially, the restrictions are meant to keep weapons "out of the wrong hands," but can have a detrimental effect. In the 1981-82 timeframe, the ROK "requested a total of \$55.4 million for third country sales approval, of which only \$1.7 million (3 percent) was approved" (81:260). In addition to a low approval rating, the US places an 8-percent royalty on arms exports with US origin." Despite third country sales restrictions, the ROK managed to increase exports during the early part of the period.

The ROK's second Force Improvement Program (1982-1986) began with an emphasis on arms production for export and steady purchases of US Foreign Military Sales. During this period, the ROK defense industry concentrated on producing "copies of conventional [foreign-made] weapons" and making "modifications appropriate for Korea's terrain and weather conditions" (32:231). This allowed for increasing levels of indigenous development and design, as well as local production of weapons. In addition, more progress was made in establishing co-production activity with foreign companies. In 1982, the ROK conducted its first flight test of a Korean Air-Northrop co-produced F-5F (32:229).

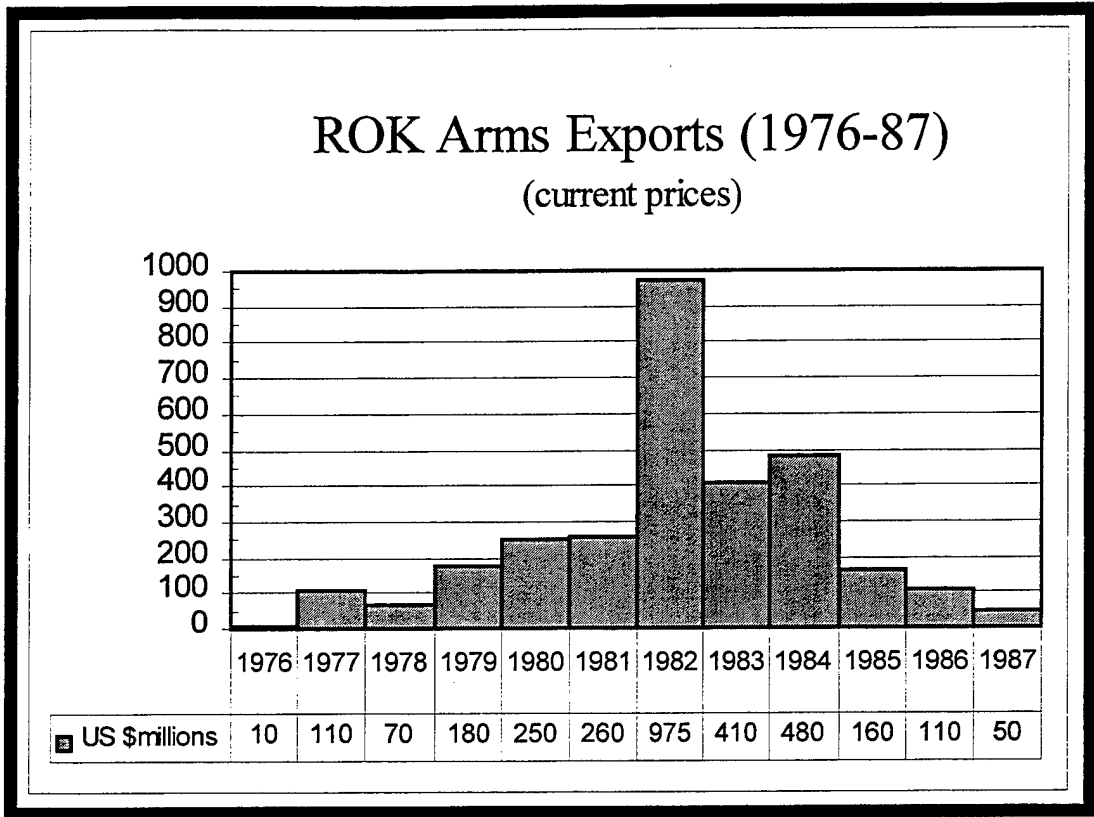


Figure 11. ROK Arms Exports, 1976-87 (98:111; 99:95)

Other noteworthy endeavors involved US and ROK agreements with production of helicopters. In the mid-late 1980s, "Sikorsky signed a contract with Daewoo Heavy Industries to produce AUH-70 utility helicopters in South Korea, while Bell Helicopter Textron joined hands with Samsung Precision Industries to coproduce Bell UH-1 helicopters" (83:6). In 1988, Bell entered into a co-production agreement with Samsung Aerospace (SSA) for the production of fuselages and tail booms for the Bell 212/412 series of aircraft (100). This was part of an offset agreement reached when the US sold 70 AH-1 Cobras to the ROK Army. This co-production agreement is still in operation and SSA continues to manufacture these components for Bell. The arrangement between

Daewoo and Sikorsky fell through and was eventually replaced by an agreement between KAL and Sikorsky to co-assemble UH-60 Blackhawks for the ROK Army.

Table 6. Major ROK License/Co-Production Programs of the 1980s (84:237)

SYSTEM	LICENSER	KOREAN PRODUCER
BK-117 helicopter	West Germany/Japan	Hyundai
F-5 Fighter	US	Korean Air
Lerici-class Minehunter	Italy	Kangnam
M-109 Howitzer	US	Samsung
Type-209 Submarine	West Germany	Daewoo
UH-1 Helicopter	US	Korea Bell
UH-60 Helicopter	US	Korean Air
Vulcan Gun	US	Daewoo

By the mid-1980s, it was estimated that the ROK had achieved "satisfying 70 percent of the nation's requirement for military equipment through 80 to 90 South Korean defense contractors [who were capable] of a wide range of defense products" (85:81). However, most of the technology employed in producing those items "was still [coming] from the United States." Table 7 contrasts US FMS, assistance, and commercial sales over four decades through 1989. Figure 12 depicts ROK imports during Chun's presidency.

**Table 7. US Foreign Military Sales, Assistance, and Commercial Exports
(US \$millions; constant 1987 prices) (86:52)**

	1950-59	1960-69	1970-79	1980-89	TOTAL
Foreign Military Sales	2	2	2,129	3,238	5,371
Commercial Exports	0	0	412	1,687	2,099
Military Assistance	4,801	7,383	5,481	530	18,195
Education and Training	191	358	62	17	628
Total	4,994	7,748	8,084	5,472	26,293

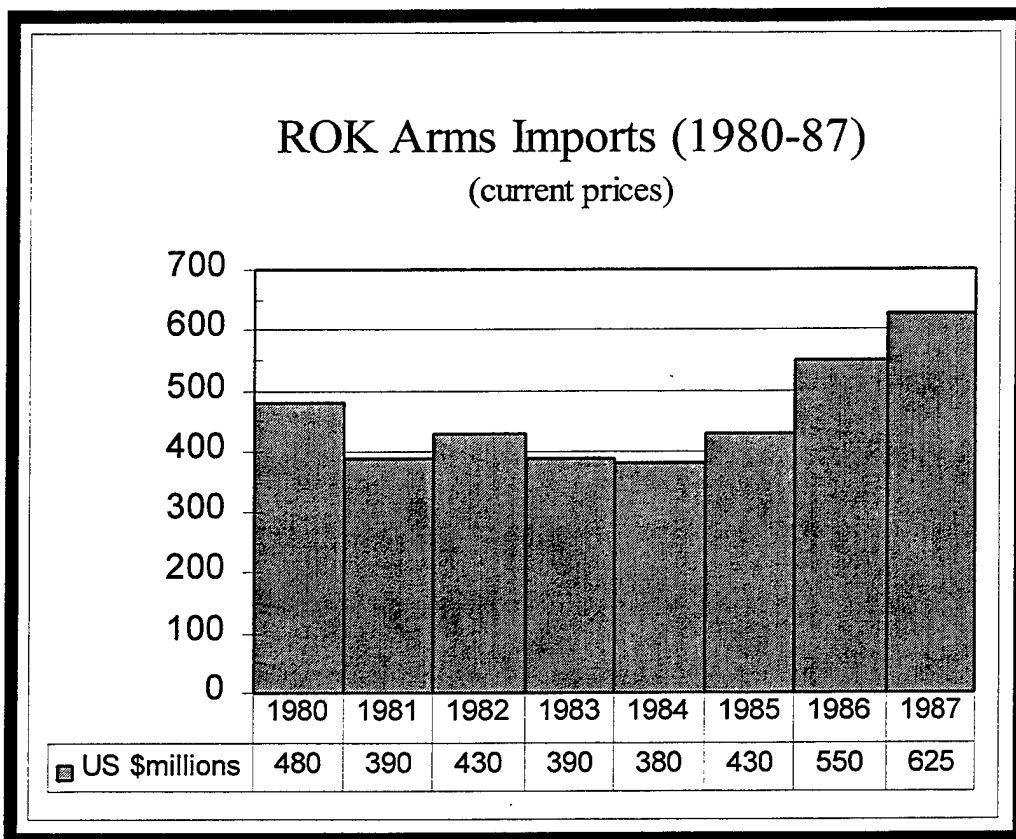


Figure 12. ROK Arms Imports, 1980-87 (98:111; 99:95)

The Roh Tae Woo Era (1988-1993)

In April 1986, President Chun appeared to go along with South Korean opposition party demands that there be an amendment to the ROK's Constitution that would allow for direct election of the next president (64). He ostensibly agreed to eight demands for reform, in addition to constitutional revision. "However, in June 1987, [under the guise of not disturbing plans set for the Seoul Summer Olympics], Chun suspended all discussion of constitutional revision, and Roh Tae Woo was handpicked by the ruling Democratic Justice Party as Chun's successor." At first the students "took to the streets to protest Chun's suspension of constitutional revision." They were followed soon after by the general public. On June 29, to the surprise of all, Roh Tae Woo publicly "distanced himself from President Chun by announcing that he would implement democratic reforms if elected." Finally, "in December 1987, Roh Tae Woo narrowly won the first direct ROK presidential election [in 16 years] with 37% of the vote."

The first point of order for the new National Assembly was the establishment of special panels to investigate irregularities of the Chun presidency, including the "Kwangju pro-democracy movement of 1980" (previously referred to as the "Kwangju uprising"), claims of election fraud, and controversial laws (78).

In the fall of 1988, the Assembly began to air televised hearings into the practices and policies of the Chun regime (64). "By late November, Chun was forced to make a public apology to the nation, turn over his personal wealth to the nation, and go into internal exile in a Buddhist temple."

After gaining international notoriety for its booming export-led economy in the 1980's, the ROK began to see slower GNP growth during Roh's time in office. It was

rapid developments in the diplomatic realm that stood out most impressively. The Twenty-fourth Olympiad held in Seoul from 17 September-2 October brought the country much needed prestige, and also "provided a pivot for the ROK's foreign policy at the end of the 1980s" (60:186).

Roh's [*Nordpolitik* ('northern politics')] shifted South Korea's declared policy toward Pyongyang and eventually launched new rounds of public and secret negotiations with North Korea's leaders. More immediate, dramatic, and lasting were the fruits of Roh's drive to establish relations with the allies of North Korea, [the Soviet Union, China, and Eastern Europe]. (60:186)

The following table summarizes diplomatic victories for South Korea during the period:

Table 8. Diplomatic Events During President Roh's Term (102; 103)

Date	Event
16 Jan, 1988	The South Korean Chamber of Commerce and Industry signs an agreement on business Cooperation for promoted economic ties with the Hungarian Chamber of Commerce
29 May, 1988	A 40 member Hungarian trade mission arrives in Seoul
7 Jul, 1988	President Roh Tae Woo declares a six-point plan to ease 40 years of bitter confrontation between Seoul and Pyongyang and clear the way for peaceful reunification of the divided homeland
16 Jul , 1988	Foreign Minister Choe Kwangsu says that South Korea would not oppose its allies, including the United States and Japan initiating exchanges with North Korea in non-political, non-governmental and non-military areas
19 Jul, 1988	Foreign Minister Choe Kwangsu says the government would permit Koreans who lived overseas and carried South Korean passports to visit North Korea and overseas Koreans with North Korean nationality to freely visit the South

Table 8. (continued)

13 Sep, 1988	South Korea and Hungary exchange ratification of a pact to exchange permanent missions, which was signed Aug. 26
4 Oct, 1988	Yugoslavia opens its trade office in Seoul.
7 Oct, 1988	The government announces a 7-point package plan to open Seoul Pyongyang economic exchanges, allowing port calls by North Korean ships carrying trade goods and private firms in the South to trade with North Korea
1 Feb, 1989	The government establishes diplomatic relations with Hungary
1 Nov, 1989	South Korea establishes ambassadorial diplomatic relations with Poland
17 Nov, 1989	The South Korean and Czechoslovak Chambers of Commerce and Industry sign an accord on business cooperation and opening trade offices in the two countries
27 Nov, 1989	South Korea opens an embassy in Poland
8 Dec, 1989	South Korea and the Soviet Union reveals that they agreed to open consulates in Seoul and Moscow
28 Dec, 1989	South Korea establishes ambassadorial diplomatic ties with Yugoslavia
16 Jan, 1990	Hyundai Business Group receives permission from the Soviet Chamber of Commerce and Industry to set up a branch office in Moscow, the first South Korean company to do so
17 Feb, 1990	The Transportation Ministry says Korean Air (KAL) and the Soviet state run airline Aeroflot signed an agreement to launch regular commercial air service
22 Mar, 1990	Czech Republic becomes the fourth Eastern European nation to establish full diplomatic relations with South Korea
23 Mar, 1990	Seoul establishes diplomatic ties with Bulgaria
30 Mar, 1990	Romania opens ambassador level diplomatic relations with South Korea in protocol signing ceremony in Seoul

Table 8. (continued)

4 Jun, 1990	Presidents Roh Tae Woo and Mikhail Gorbachev agree to normalize diplomatic relations between their two countries at an early date in a historic summit, the first ever between South Korea and the Soviet Union, in San Francisco
30 Sep, 1990	South Korea and the Soviet Union open a new chapter of history by establishing diplomatic relations at the ambassadorial level
21 Jun, 1991	President Roh Tae Woo and Polish Prime Minister Jan Krzysztof Bielecki agree to upgrade civilian and trade exchanges at summit talks in Seoul
10 Apr, 1992	South and North Korea agree in principle to open a shipping route between In-chon and Nampo and remove tariffs on trade between the two sides.
24 Aug, 1992	Foreign Ministers Lee Sangock of Korea and Qian Qichen of China sign a six-point joint communiqué in Beijing to open full ties between the two countries
22 Dec, 1992	South Korea and Vietnam restore relations severed in 1975

US Foreign Policy and Relations with South Korea (1988-1993). Anti-American sentiment began to peak in South Korea during the late 1980s. During the Olympic games in Seoul, in 1988, anti-American sentiment was extraordinarily high, with "South Koreans charging US athletes with arrogance and US media with negatively depicting their country" (104). Another issue that irritated feelings between the two countries was trade. In 1987, South Korea had a \$9.5 billion trade surplus with the United States (105). This gave the US the leverage it needed to apply pressure on South Korea for relaxed beef and cigarette imports, greatly angering South Korean farmers. Another factor that bothered South Koreans was the US troop presence. Many Koreans had become angered

at what they perceived as special treatment accorded US military personnel involved in crimes (106:28-29). Huge anti-American demonstrations took place in 1992 after a US serviceman murdered a South Korean prostitute, and in 1995, a mere subway brawl between Koreans and US servicemen sparked popular discontent throughout South Korea. In addition to social disfavor with the US, "the ROK army resented the fact that [an American general]" still had charge over all ROK forces. The US took steps to resolve this issue when it was announced in June 1991 that the US military in South Korea would shift from a leading role to a supporting one by turning over command of combined ground forces to a Korean general (107). The initiative actually took place in 1992 with the "appointment of [South] Korean General Kim Dong Shin to command the ground component of the Combined Forces Command" (108).

In another attempt to further US-ROK diplomacy, the US supported the ROK's decision to cancel the 1992 US-ROK bilateral exercise, Team Spirit, to facilitate a deal with North Korea to allow outside inspections of its nuclear facilities (60:264). Then, in an effort to seal compliance on the issue, "South Korea disclosed that all US atomic weapons had been removed from South Korean soil, and offered to open US military bases in South Korea to inspection by North Korea" (109).

Another foreign relations issue between the US and ROK that was debated during the period was the idea of "burden-sharing." As the ROK economy roared ahead and significant trade deficits with the US began to pile up, US-ROK relations were at the crossroads, about to enter a new sphere.

"From 1946 to 1976, the US had provided more than \$7 billion in military assistance to South Korea, and more than \$2 billion in FMS loans from 1971-86" (1:59). In 1987, however, "the US stopped FMS loans and began asking the ROK government to begin considering sharing the financial burden of mutual defense efforts." After a \$7.4 billion trade deficit was reported in 1986, US pressure mounted and the issue was broached at the 19th Security Consultative Meeting on 5-7 June 1987. At the meeting, both sides agreed that changes in the relationship were forthcoming. As a result, "the two countries agreed to incrementally increase South Korea's contribution by about \$40 million annually [beginning in] 1989," when the ROK contributed \$45 million (See Figure 13) (1:59-62).

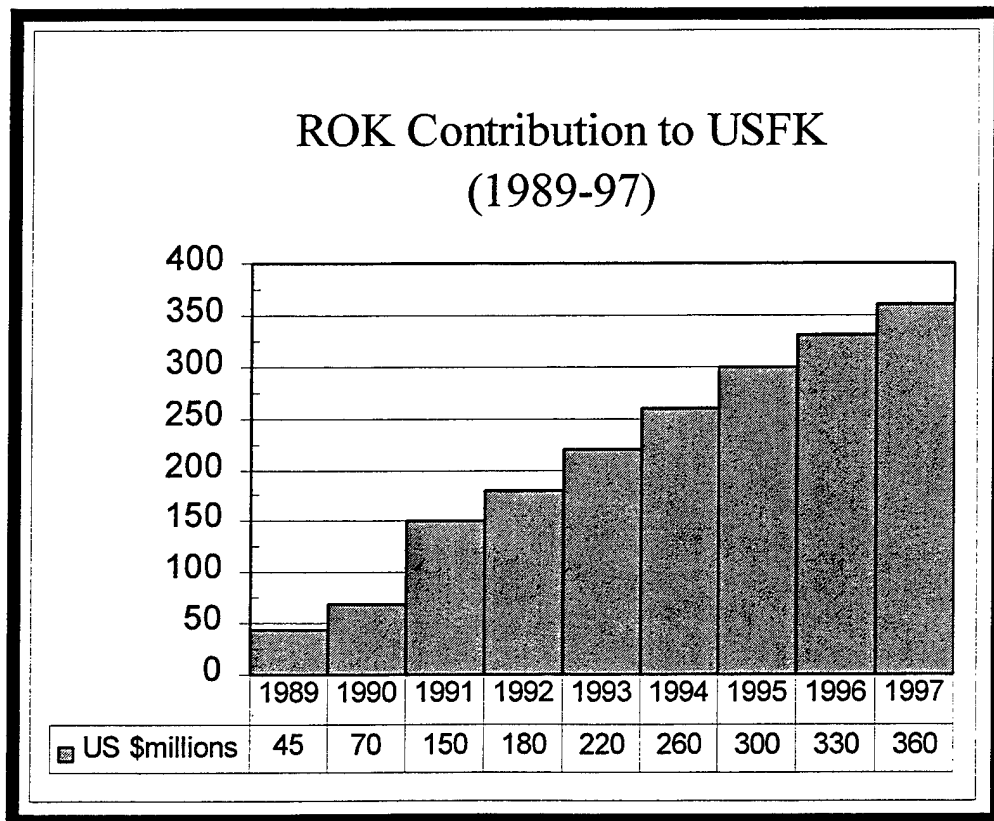


Figure 13. ROK Contribution to US Forces Command, 1989-1997 (110:228)

In June 1989, due to changing threat perceptions and the need to further reduce military expenditures, US Senator Dale Bumper brought forth a proposal to pull 10,000 troops out of South Korea (1:60). "In February 1990, US officials announced that the 43,000 US troops stationed in the ROK would be gradually reduced [in three phases]" (111). Phase one was carried out, reducing the number of troops by 7,000. Phases two and three (unspecified numbers) would occur at later, unspecified dates, depending on the security situation. In November 1991, these last two phases were indefinitely delayed in response to the North Korean nuclear issue.

In addition to troop cuts, US operations at three airbases were closed, and agreements to make them "collocated operating bases," granting the US operational use of the bases should the need arise, were put in place.

The North Korean Threat (1988-1993). Running counter to the winds of change brought on by lessening tensions between the Soviet Union and US, *The Washington Post* reported in January 1989 that North Korean armed forces increased, numbering over one million (112). US Central Intelligence Agency and Defense Intelligence Agency officials had recently agreed on the figure, giving the DPRK the 5th largest standing army in the world.

During the period, the DPRK continued to actively pursue a ballistic missile program, successfully launching a "Nodong 1," with a range of 1000 kilometers, into the Sea of Japan in 1993 (96).

In addition to its ballistic missile program, the DPRK embarked on a program to develop a nuclear capability. The program, which actually began in secrecy back in the

early 1980s, came to light in May 1989, "when a five-member US team of experts traveled to Seoul and Tokyo to provide the first extensive briefings" on evidence that had been building up in the US intelligence community (60:256).

The story immediately grabbed international attention, and in 1990, North and South Korea began talks "which resulted in a 1991 denuclearization accord" (113). North Korea agreed "to accept International Atomic Energy Agency (IAEA) safeguards [which prompted] a series of IAEA inspections of North Korea's nuclear facilities beginning in 1992" (64). The issue would not be solved in Roh's term as president, but would be a major test of Kim Young Sam's presidential and diplomatic skills.

South Korean Defense Industry (1988-1993). "By 1993, there were eighty-four defense contractors in South Korea, working on 284 defense-related programs and employing approximately 45,000 workers" (84:238). Much like South Korea's civilian sector, "a small number of giant corporations (*chaebol*) dominate the ROK's defense [sector]" (67:131). Known internationally as producers of "textiles, automobiles, home appliances, and electronics products," the *chaebol* manufacture the majority of defense systems that South Korea produces. Companies like Hyundai, Daewoo, Lucky-Goldstar, and Samsung make up close to "75% of all ROK military procurement" (84:238-240). As the ROK's defense industrial base became increasingly more sophisticated, greater industrial cooperation between the US and South Korea began to emerge (86:53). One of the more prominent examples of this involved an agreement involving the ROK's plans for future production capability of an indigenously produced fighter aircraft.

Back in the early-to-mid-1980s, the ROK government and ROKAF envisioned achieving an indigenous fighter aircraft production capability sometime after the year 2000 (114:70-73). They developed a program, known as ROKAF 2000 plan, which they planned to conduct in three phases, through which the procurement of technology and manufacturing skills would ultimately lead to an indigenous fighter. On the South Korean side, Daewoo and Samsung vied for the contract, and on the US side, Northrop and General Dynamics competed. Northrop dropped out in 1986 because of a decision not to make the F-20, and McDonnell Douglas took its place in competition for the contract. In 1989, after three years of "evaluating proposals," the ROK government selected McDonnell Douglas' F-18. At first, the ROK requested off-the-shelf purchase of three aircraft, 20 in kit form, with the remaining 97 to be produced in South Korea under license. Later, a mix was agreed upon which was comprised of 12 off-the-shelf, 36 kits, and 72 under licensed production. In a reversal of the agreement, however, the ROK re-opened competition for the bid in 1990, complaining of excessive costs associated with the deal.

Finally, on 28 March 1991, South Korea announced an order worth \$5.2 billion to purchase 120 F-16 fighter aircraft from General Dynamics (89). Included in the package (the 12-36-72 mix remained intact) was an award "to Samsung Aerospace Industries Corp. to produce 72 of [the F-16s] under license." Only 12 of the aircraft would be entirely US-made. A South Korean defense ministry official claimed that McDonnell Douglas had raised the package price of their offer from \$4.5 billion to \$6.2 billion. For that reason, a newly appointed Korean defense minister shifted consideration in favor of the cheaper F-16. However, an article in the *Bulletin of the Atomic Scientists* reported

that it was "direct offsets that clinched the \$5.2 billion deal" (116). "On top of the transfer of manufacturing and assembly know-how, South Korea received 30 percent of the contract value (more than \$1.5 billion) in undisclosed offsets."

The early-to-mid 1990s witnessed a greater degree of autonomy by South Korea in the development of its defense industry. Obstacles still exist, however. *Defense News* reported that South Korea was attempting to join the Missile Technology Control Regime (MTCR) in 1995, because an earlier Memorandum of Agreement (MOA) between the ROK and US restricted South Korea to deploying missiles with a range of less than 180 kilometers (117). The MOA had been brought on because of work the South Koreans were involved with in producing an indigenous surface-to-surface missile with an expected range of 260 kilometers. Fearing arms proliferation, the US persuaded the ROK to forgo development of the missile in exchange for US defense assurances. By joining the MTCR, the ROK would be permitted to develop a missile with a 300 kilometer range.

In the 1990s, the ROK was producing "M-16 rifles, M-60 machine guns, F-16 fighters, UH-60 Black Hawk Helicopters, and AN-PRC radio sets [via] license production arrangements" (86:53). In addition, it was producing "20 mm Vulcan air defense guns, M-109 howitzers, and Hughes 500-MD helicopters [in co-production agreements] with the United States." The 1990s also began seeing a greater proclivity by the ROK to pursue contractual arms arrangements with nations other than the United States. Between 1992-1994, world arms exports to South Korea were shared equally between the United States and Germany. Figure 14 depicts ROK arms imports for the period, through 1995.

The Kim Young Sam Era (1993-1998)

Under the banner of building a New Korea by regaining national self-confidence and reinstating the Korean spirit of cooperation and industriousness, Kim Young Sam was elected president on 18 December 1992 (101). Winning 42 percent of the votes, Kim was the first ROK ruler in 32 years who was not a former army general. "In his inaugural

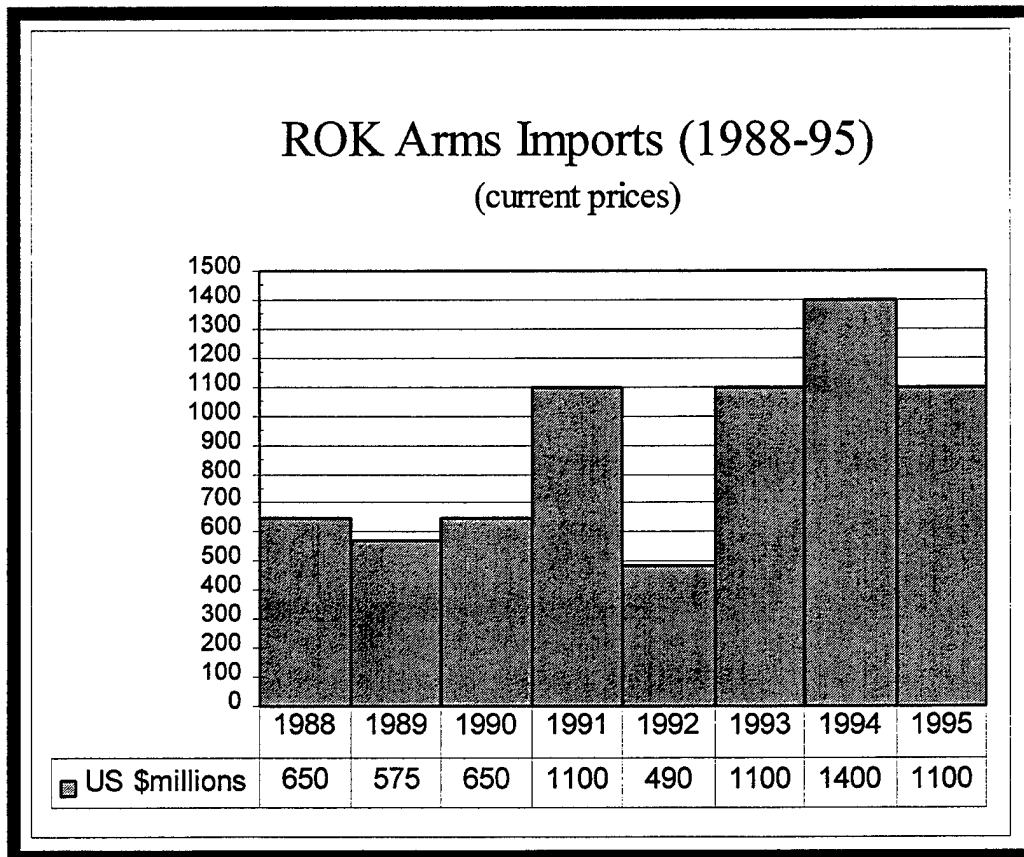


Figure 14. ROK Arms Imports, 1988-95 (118:129)

remarks on 25 February 1993, President Kim vowed publicly to fight corruption in the public and private sectors." Within his first few months in office, President Kim unleashed a hard hitting campaign of reform. One of his initiatives was to require "the submission of financial statements by all major government figures, political and

military." Due to these measures, several of Kim's initially appointed cabinet members were forced to resign when their past improprieties were made known to the public. Kim's "anti-corruption efforts extended to not only his administration and political party, but also to the military, universities, banks, and [police force]". In previous regimes, some of these sectors had been notorious for being sanctuaries for corrupt activities.

In addition to these wide sweeping reforms, Kim also took action against his predecessors, Chun Doo Hwan and Roh Tae Woo. On 26 August 1996, "Chun Doo Hwan was sentenced to death and fined \$270 million for mutiny, treason and embezzlement" (119). In a lesser sentencing, Roh Tae-woo was given "22 1/2 years in prison and fined \$350 million." Their crimes were rooted in the 1979 coup and subsequent crackdown, which included the bloody Kwangju incident.

Another target for Kim was the *Yulgok* defense procurement program. Kim ordered an investigation of the program in April 1993. Until then, the program had not been subject "to an audit for 19 years," as the bureaucrats and military officials who ran the program were not expected "to give details of what they were buying to the public or the National Assembly" (120:36). As a result of the investigation, "39 generals were sacked, reprimanded, or jailed." Other problems were noted as a result of the investigation. According to *The Economist*, in South Korea,

Weapons have sometimes been chosen not on the basis of how effectively they will contribute to the country's defense, but according to how much technology the manufacturer is willing to transfer. The defense ministry opted to buy French Mistral missiles last year, instead of American Stingers, because the Americans refused to pass on to Korean companies guidance and warhead technologies. Korean industry may benefit from the know-how that will come with the Mistral, but several officers have complained that the French weapon is not as mobile or as quickly reloaded as the Stinger. (120:36-37)

Another great shakeup occurred when "just hours after the Chun and Roh" sentencing, "nine of South Korea's wealthiest and most influential business leaders were sentenced [for paying bribes]" (121). Included in the sentencing were the heads of Samsung and Daewoo. The corporations these leaders represented, known as Chaebols, had dominated in Korea, working hand-in-hand with the governments of Park, Chun, and Roh. *The Washington Post* quoted a South Korean industry source as saying, "For 30 years, the military regime was possible because of the support and money they got from the chaebols and the chaebols grew, because of the support of the military" (121). In describing the impact the shakeup had both culturally and financially for South Korea, *The Washington Post* summed up the situation:

Korea Inc. worked like this: The government would decide who should invest in a particular industry. It would then provide that company with the investment money, usually at low interest rates. The government would also tell the company where to build the factory and often would be involved in decisions on pricing, wages and purchasing of equipment. The government protected the chaebols from foreign competition, and even 'excessive' domestic competition. And it kept labor costs low, by using its intelligence agency to harass and jail labor leaders. It also bailed out troubled operations by providing additional money or by transferring assets to other companies. For instance, when a South Korean auto company went bankrupt in the 70s, the government transferred its assets to Daewoo Motors. Likewise, Park directed Daewoo to take over an unprofitable machinery plant, which in time formed the basis for Daewoo Heavy Industries Ltd. Assured of a government bailout, the chaebols expanded with little consideration of risk. Their forays were often seen as reckless plunges into new industries where they had little expertise in the technologies or the markets. Over time, the tentacles of the chaebols reached into just about every business in South Korea--construction, chemicals, consumer electronics, semiconductors, cars, shipbuilding, newspapers. The combined sales of the four biggest grew to account for more than 80 percent of the nation's gross domestic product. With the government controlling so many aspects of business, cash payments became an integral part of doing business here, according to court testimony and numerous businessmen. And while attention has been focus on the payments between chaebols and top officials, the corruption trickled down to the lowest level of the business environment. (121)

Kim's reforms would eventually hit close to home. On 18 May 1997, Kim's son was arrested on bribery and tax evasion charges. He was accused of taking \$3.6 million in bribes from business seeking favors from his father, President Kim (122).

The economy would perhaps become the greatest issue for the Kim regime to grapple with. The ROK economy was not performing at the same level it had been during most of the 1980s. Since 1989, Korea's trade bilateral surplus with the US declined, producing a trade deficit with the US for the first time in 1994. Appreciation of the Korean currency, the won, increasing labor disputes, wage increases, and strong domestic demand have all contributed to the economic slowdown. At the beginning of the 1990s, the ROK government began implementing economic stabilization policies aimed at slowing up construction, private consumption, and investment. As a result, real GNP growth slowed to approximately 5% by 1992 (64).

By November 1997, the bottom seemed to begin falling out of the ROK economy. On 21 November, the ROK government resigned to what it had earlier stated as "unthinkable," and "asked the International Monetary Fund (IMF) for a \$20 billion bailout for its foundering economy" (123). The economy had been "spinning out of control for almost a month, the result of a series of major corporate bankruptcies that brought a loss of foreign confidence" (123). South Korea made the agonizing decision after going to the US and asking for financial assistance. When the US turned the request down, South Korea, then asked "its former colonial ruler and chief economic rival, Japan," but Japan turned down the request, as well. The ROK's economic problems had come "to a head this year when the economy slowed down, sales dropped, and some of

the weaker conglomerates went belly up, saddling banks with \$26 billion in bad loans" (124).

On 30 November, ROK Finance Minister Lim Chang-yuel told reporters that "South Korea (had) reached an agreement with the IMF on a loan to cope with the country's deepening debt crisis" (125). The entire package tops \$55 billion, of which the "IMF is actually contributing \$21 billion" (126). In addition, the "World Bank will contribute \$10 billion, the Asia Development Bank, \$4 billion, [with the] rest coming from other nations including the US, Japan, Canada, Australia, Germany and the United Kingdom."

In the waning days of the Kim regime, the South Korean economy, which had been one of Asia's greatest success stories, was caught in an economic crisis, and was forced to adhere to massive reform to comply with terms of the IMF bailout package. Conversely, the US was enjoying a strong economy, marked by low inflation, low unemployment, and steady growth. In line with promoting a strong economy, the US bolstered support for its domestic arms industry encouraging greater emphasis on marketing US weapon systems overseas.

US Foreign Policy and Relations with South Korea (1993-1998). This period would see a US policy regarding arms sales become strongly supportive of the US defense industry and its international marketing efforts. "Acutely sensitive to the possibility of unemployed defense workers, the Clinton administration has provided unparalleled support to the industry" (127:3). On 8 May 1993, Secretary of State Warren Christopher disseminated a message (DTG 081416Z MAY 1993; Subject: Advancing US

Business and Economic Interests) "encouraging US embassies to actively assist US marketing efforts overseas" (128:37, 138). Known as the "Christopher Cable," the message was "interpreted to include aiding US civilian defense contractors in the pursuit of direct commercial sales and foreign military sales of defense articles, services, and training overseas" (128:37).

In November 1994, a US Department of Commerce, Bureau of Export Administration document produced by the Under Secretary for Export Administration William A. Reinsch, was published and disseminated, entitled, "Pacific Rim Diversification and Defense Market Assessment." In the assessment, guidance is given to assist defense-related marketing efforts in Pacific Rim countries:

The end of the Cold War and the resulting reductions in defense spending has afforded many challenges for US industry. The Department of Commerce, through the Bureau of Export Administration, has developed a comprehensive, national defense conversion program to provide assistance to US defense firms in this period of transition. An important component of this defense conversion program is to provide current market information on commercial as well as defense business opportunities abroad in order to assist US firms in their market and product diversification efforts. The Department of Commerce is deeply committed to assisting US firms in their efforts to successfully meet and overcome the challenges of the post Cold War era. (5)

In its economic overview of South Korea, the assessment reads, "Current tensions on the Korean Peninsula mean that there is little downturn in defense spending here and will result in a demand for US defense as well as commercial products" (5).

In a message disseminated by Secretary of State Christopher in February 1995 (DTG 180317Z Feb 1995), both an explanation of the Clinton Administration's conventional arms transfers and criteria for decision-making on US arms exports was

provided. In the message, Paragraph 2 describes the Administration's policy on arms transfers, which was announced as Presidential Decision Directive 34 (PDD-34).

PDD-34 was interpreted by Secretary Christopher as "the Administration's view ...that sales of conventional weapons are a legitimate instrument of US foreign policy, enabling allies and friends to better defend themselves, as well as help support our defense industrial base" (128:43). Listed under the heading "General Criteria, All arms transfer decisions will take into account the following criteria:" in Paragraph 6 of the message, is a consideration as to "the impact on US industry and defense industrial base whether the sale is approved or not" (128:46).

At the same time US efforts were aggressively promoting support of arms sales, ROK President Kim Young Sam was conducting all-out reform of the ROK weapons acquisition apparatus. Traditional arrangements nurtured under the *Yulgok* program which had flourished during the Cold War were under fire as corrupt vestiges of the Roh, Chun, and Park presidential regimes.

The financial crisis which enveloped the ROK would also have a significant impact on the South Korean defense industry, as well as weapons acquisition. On 8 June 1998, it was reported that an agreement had been reached between the ROK and US to defer Foreign Military Sales (FMS) payments as a way to "lessen the burden on the ROK caused by the sharp rise in the exchange rate" (129). The agreement, announced by the ROK Ministry of National Defense, stipulated that the ROK had "agreed with the US to defer US\$1.196 billion of the total US\$1.37 billion due for payment in 1999 until 2000." Under the terms of the agreement, "payments to the US this year will be reduced to US

\$46 million from US \$1.08 billion and next year to US \$128 million from US \$290 million."

With the exception of the financial crisis that South Korea fell into at the end of Kim's term in late 1997, US relations with South Korea during Kim's presidency until 1995 were largely centered around security developments involving North Korea. The first major issue resulted from the North Korean nuclear crisis. Once that crisis was defused, the Clinton administration was able to move on to other concerns. The administration was, in effect, able to focus its attention primarily on domestic issues that it felt had been neglected by previous administrations. Kim's government was busy focusing on its domestic agenda, as well.

During Kim's presidency, anti-American sentiment was not as sensitive an issue as it had been in the late 1980s. The South Koreans were seemingly busy with issues much more "closer to home." They had seen events transpire in Germany and were beginning to see possible signs of reunification. The initial euphoria, however, was joined by the pragmatic concerns over costs that would be associated with such an event. In addition, continued bizarre and erratic incursions by North Korea would emphasize the reality and danger posed by the North. Thus, the requirement for a strong defense and continued vigilance was not lessened.

The North Korean Threat (1993-1998) Along with the Presidency, Kim Young Sam inherited the ongoing nuclear crisis with North Korea. In 1993, IAEA inspections were halted when the North first refused to allow special inspections of two areas suspected of holding nuclear waste, and then threatened to withdraw from the Nuclear

Non-Proliferation Treaty (NPT) (113). This action also killed progress that was being made in North-South dialogue. "On 11 May 1993, the UN Security Council passed a resolution urging the DPRK to go along with IAEA inspections and to implement the 1991 North-South denuclearization accord." The US attempted to influence the DPRK "through political-level talks in early June 1993 that [only] led to a joint statement outlining basic principles for continued US-DPRK dialogue and North Korea's 'suspending its withdrawal' from the NPT." Another round of talks was held 14-19 July 1993 in Geneva, which set "guidelines for resolving the nuclear issue, improving US-North Korean relations, and restarting inter-Korean talks." However, the talks ended in deadlock, and a period of tremendous tension ensued due to the failure to resolve the nuclear issue.

At the height of the crisis, in June 1994, former President Jimmy Carter traveled to Pyongyang and met with Kim Il Sung, "helping to defuse tensions and resulting in renewed North-South talks" (64). "On 21 October 1994, representatives of the United States and DPRK signed an agreed framework for resolving the nuclear issue" (113). The framework stipulated that North Korea would freeze its reactor program, which was capable of producing plutonium for nuclear weapons (64). "In return [for this], the DPRK was to receive alternative energy, initially in the form of heavy oil, and eventually two proliferation-resistant light water reactors." As part of the plan, the US pledged it would try to improve relations between the itself and the DPRK.

To add to the fears that the nuclear crisis was producing, former CIA director James R. Woolsey announced on 17 March 1994, that the North Koreans were further developing their ballistic missile capabilities (96). Woolsey was probably referring to the

Nodong 2, with a range of 1,500 kilometers, the Taepo Dong 1, with a range of 2,000 kilometers, and the Taepo Dong 2, with a range of 4000-6000 kilometers. Woolsey warned that the new missiles "could put all of Northeast Asia, Southeast Asia, and the Pacific area at risk."

In what would be a surprise to South Korea and the United States, North Korean radio announced on 9 July 1994, that Kim Il Sung, revered leader of the DPRK, had died the previous day (60:341). The communist cult figure, in charge of North Korea for almost fifty years, held a prominent position in world affairs in classic brinkmanship style right up until his final days. There was much anticipation on the US-ROK side as to how political events would flow from this point. Power appears to have been formally transferred to Kim's son, Kim Jong Il.

Not long after Kim's death, however, tensions filled the air again on 17 December 1994, when two US army warrant officers in an unarmed helicopter inadvertently flew five miles over the DMZ and into North Korea. Upon being shot down, the pilot, "Chief Warrant Officer David Hileman was killed, but the copilot, Chief Warrant Officer Bobby Hall, survived" (60:359). He was captured, detained, and later released through Panmunjom back to US authorities on 30 December. The speed with which Hall was released was unusual, in light of previous incidents.

North Korea was becoming an international dilemma by the mid 1990s. Its founding leader was gone, and it was hit with massive back-to-back monsoons which caused heavy flooding, and subsequently, tremendous damage to what few crops North Korea was capable of growing. Food shortages and drought, combined with growing international isolation seemed to be weakening the DPRK. Aggression aimed at South

Korea continued, however, and the North Korean military showed no signs of falling apart.

In April 1996, North Korea formally declared "it would no longer recognize the armistice that ended the 1950-53 Korean War" (130). It then "marched heavily armed troops into the neutral border village of P'anmunjom," putting the entire "650,000-member South Korean military" on high alert. No serious developments evolved from this, although it was a flagrant violation of the armistice agreement.

On the morning of 18 September 1996, a cab driver dropping off a passenger along a seaside road near the city of Kangnung, noticed a strange object in the water "which he thought at first to be a giant dolphin" (60:387). "The submarine had crossed into southern waters on a [tactical reconnaissance mission] with 26 North Korean commandos aboard" (131). It was discovered after it ran aground on a beach south of Kangnung, off of the ROK's eastern coast. During what would turn out to be a massive, 49-day manhunt, the ROK military and police shot 13 commandos (11 had already been found, all shot in the back of the head, apparently in a suicide pact). Only one North Korean infiltrator was captured alive. Twelve South Korean soldiers, four civilians and one ROK reservist were also killed during the ordeal.

On 21 April 1997, the highest-ranking North Korean defector in history arrived in Seoul (132). Hwang Jang Yop had been a personal tutor to the North Korean leader, Kim Jong Il. The fact that such a high-ranking defection would occur signaled the idea that things could be getting much worse in North Korea. Hwang offered a grim assessment that supported the notion that circumstances in North Korea were dire. According to *The Washington Post*, "The State-run economy is failing and law enforcement officials across

Asia say North Korea apparently has turned to selling drugs, arms, and counterfeit money to raise cash."

In the ROK's *1997-1998 Defense White Paper*, it was noted that "Due to contradictions within the socialist economic system and with its economic policy, the North [has suffered] seven consecutive years of minus economic growth since 1990" (110:44). As a result, "its internal control system seems to have weakened because of food shortages and economic deterioration." Yet, it also acknowledged that despite the grave situation the DPRK was in, "...its policy toward South Korea...has concentrated efforts [on raising] military tensions and create conditions for communizing the South" (110:45).

South Korean Defense Industry (1993-1998). Between 1993 and 1995, South Korea was the world's fourth largest arms importer, with \$3.5 billion (133). The United States was the world's largest exporter of arms in 1995, with \$15.6 billion. This figure was "three times that of the next supplier (U.K.) and 49% of the world's." The US stayed on top in 1996 with "\$11.3 billion in global arms sales," and South Korea finished fourth among developing countries with \$1.2 billion in arms imports (134). The supplier-recipient relationship between the US and South Korea remained intact during the period, as the need to reinforce post-Cold War US arms exports to buttress diminished domestic orders for production is complemented by South Korea's continued need to refine its weapons capabilities against a still active North Korean threat.

In its quest to meet military requirements demanded by high-tech weapon systems, the ROK recognizes an urgent need for technological improvements in its

defense industry (110:183). Although it has diversified and allowed more nations to take part in filling its weapons needs, the ROK still desires defense industrial cooperation with the United States (110:185). However, in its *1997-1998 Defense White Paper*, the ROK complains, "Since the mid-1980s the defense industry has faced great difficulties mainly due to the evasion of technological transfer by the US." To counter this, it appears the ROK has attracted competition from US defense contractors, and then settled on a particular contractor depending on the level technology transfer agreed upon as an offset deal. In June 1996, *Arms Trade News* quoted a Commerce Department Report stating, "Pacific Rim countries such as Singapore, South Korea, and Taiwan are seeking offset deals that include increased technology transfer, particularly in aircraft design, to become self-sufficient in defense production" (135).

Citing the fact that US defense contractors face increased competition in the multibillion dollar South Korean arms market, the *Associated Press* reported on 1 May 1997 the arrest of the "head of Far Eastern operations for Litton Industry Inc.'s Guidance and Control Systems Division" (136). Evidently, "he was charged with collecting classified [details of the ROK's] arms procurement plans" in an apparent attempt to get ahead of the competition. The plans covered \$33.6 billion worth of new weapons to be procured "over the next six years starting in 1998." *The Washington Post* reported that the Litton businessman, (Donald Ratcliffe, 62), was accused of "obtaining secrets concerning South Korean plans to purchase AWACS technology, and could face the death penalty" (137). A ROKAF "lieutenant colonel and five civilians were [also] arrested on allegations they [had] passed secrets to Ratcliffe."

Another source of aggravation for the ROK is in the area of third country sales of defense items of US origin. In 1995, the US granted South Korea the permission to "export K-1 tanks that it makes using US technology" (138). In the same year, the US assured South Korea that the ROK would be the nation to "supply [light water] nuclear reactors to North Korea (138). Despite this, third country sales have been continued source of irritation for the ROK. A Defense Security Assistance Agency Information Paper on the ROK listed complaints from South Korea on this issue:

- Frustration over apparent poor file maintenance by the State Department in tracking ROK requests
- Unhappiness with the timeliness of State Department replies
- Dissatisfaction with case-by-case reviews by US; US policy seems to over-scrutinize ROK cases when compared with review policies of other exporting countries
- View that the US third country sales policy inhibits ROK business opportunities. ROK sees weapon acquisition from cost and economic advantage standpoint, in addition to defense. Purchases are viewed in the context of whether a given acquisition can be converted into a profitable export item or adapted to absorb excess capacity in the defense industry at some future date. (139)

As a result of frustrations in areas such as third country sales and technology transfer, the ROK has been seeking other alternatives to the traditional US-ROK weapons sales arrangement. Other factors may be paving the way for new arrangements to evolve. President Kim's term, marked by reforms and changes in the traditional *chaebol*-government relationship, may also have shaken the complacent *chaebol* into avoiding some of their older, familiar defense procurement practices and leanings toward favored overseas defense contractors. Also, inclusion of non-traditional supplier nations such as England and Russia into the realm of competitive consideration has shown a willingness

on the ROK's part to diversify beyond the familiar US-ROK relationship. A *Defense Week* analysis cited a Commerce Department report on Pacific Rim opportunities, which explained that, "US companies hoping to crack the lucrative South Korean defense market '[were] not playing on a level ball field' with European firms." According to the report, European firms were trying much harder to make deals, "paying higher fees and commissions to in-country marketing agents than US companies." Noting the intensity in competition that Russia's entry as a potential ROK supplier had caused, the report added, "Koreans are very much aware of these changes and are attempting to take advantage of these conditions by acquiring advanced technologies to improve self-sufficiency in defense" (140).

The ROK economic crisis will undoubtedly reshape the approach used by the ROK in weapons development and acquisition. Agreements allowing deferments of ROK FMS payments are one aspect of this newly evolving development. Perhaps even greater indications of the ROK defense industry reshaping itself are recent changes made by the Ministry of Finance and Economy. On 6 April 1998, the *Korea Herald* reported that the ROK Ministry of Finance and Economy had "decided to allow foreign investors to conduct hostile mergers and acquisitions of ROK defense industry-related enterprises" (141). Prior to the announcement, the government had authorized off-shore investors ownership of less than "one-third of the total equity in any Korean enterprise without approval from the relevant company's board of directors."

In another development reported on 8 April 1998, the ROK "Defense Ministry is planning to restrict foreign arms suppliers from future contracts should they be found to have overcharged in previous bidding" (142). The newly appointed Defense Minister,

Cheon Yong-taik was quoted as saying, "During a briefing with the Defense Procurement Agency last week, I ordered the consideration of such punishment against unscrupulous arms suppliers." The new policy reportedly came about due to problems between the Ministry and some US defense contractors. At the center of these disputes are Lockheed Martin P-3C sales, and Sikorsky UH-60 Black Hawk helicopter sales. Both companies are alleged by the ministry to have over-charged the ROK. Another issue involves a law suit against Pratt & Whitney regarding defective engines which allegedly caused the crash of two ROK F-16s. It appears that this type of policy reform is linked directly to ROK outward expressions of financial concern, as well as growing resentment at paying perceived over-priced US weapons.

Chapter Summary

The purpose of the literature review presented in this chapter was to arrive at an understanding of ROK weapons development and acquisition policy, focusing on historical developments through each ROK presidential administration. Each regime was viewed through the respective lenses of ROK political development, US-ROK relations, and the North Korean threat. By treating the issue of arms development in this manner, analysis of South Korean defense, namely defense industrial development and acquisition, could be thoroughly examined. The literature review has been presented with the ultimate intention of providing a better understanding of the US-ROK relationship, vis-a-vis weapons procurement and acquisition policy.

IV. Case Study : The SAM-X Project

Introduction

The SAM-X project is part of an extensive air defense program formally announced in October 1997, by the ROK Air Force (ROKAF). At its most transparent level, the SAM-X project represents a response by the ROK government to a perceived expanding missile threat from North Korea, as well as an essential upgrade to existing air defense systems. More appropriately, the SAM-X represents a culmination of events and activities that involve the principal actors which influence South Korean affairs: the US, North Korea, and the ROK. The US exerts regional and international influence in the form of regimes, treaties, and alliances that impact the ROK's capacity to defend itself, and in part, defines the parameters the ROK must work within to achieve that defense. North Korea, the antagonist in South Korean affairs, is the *raison d'etre* for the defense structure of South Korea. As the protagonist and chief advancer of its own affairs, the ROK seeks to "deter military threats and provocations from the North and develop a future-oriented defense capability to prepare [themselves] for the twenty-first century and national unification" (110:63). The principal actors, as well as significant factors relevant to the SAM-X case, will be expanded upon in the following paragraphs.

The US, with 37,000 troops stationed in the ROK, still wields considerable influence in ROK decisions regarding the development, acquisition, and fielding of weapon systems. As long as the US remains committed to defending the ROK from North Korean aggression, issues such as standardization and interoperability between US and ROK equipment, logistics, and procedures will continue to be emphasized.

In addition to theater-related issues, the US exerts *de facto* international influence through its position of world leadership. In terms of security, this influence reaches South Korea both indirectly and directly. Indirectly, South Korea is influenced through such vehicles as the Intermediate-range Nuclear Forces (INF) and Anti-Ballistic Missile (ABM) treaties signed by the US and Soviet Union (now Russia). More directly, South Korea is affected by the Nuclear Non-proliferation Treaty (NPT) and Missile Technology Control Regime (MTCR), both of which feature US leadership and ROK involvement. In addition, the ROK has entered into several bilateral agreements with the United States regarding various aspects of defense, including restrictions on ROK missile development. Because of this, the ROK has conducted air defense acquisition and developmental work within parameters established by agreement with the United States. US backing of the MTCR and US initiatives involved with theater missile defense (TMD) appear to be the common thread running through issues involving the ROK and missiles. Both the MTCR and TMD have impacted the SAM-X project, and as such, will be examined in the background of this case study to help illuminate developments leading up to the SAM-X.

Despite its admitted hardships, North Korea lingers on as a potential threat to regional stability and remains enigmatic to the world community. It is home to one of the world's last "communist" regimes, and although experts predict an "imminent implosion" of the totalitarian state, its characteristic unpredictability remains an international concern (143). In February 1997, the architect of North Korea's governing ideology of *juche*, or self-reliance, 74-year-old Hwang Jang Yop, defected to South Korea. Hwang,

by far the most prominent defector ever to go to South Korea, warned that despite recent moves toward peace, North Korea was planning for a massive war with the South. On 10 July 1997, at a nationally televised news conference in South Korea, Hwang warned a reporter that North Korea's war preparations "exceed your imagination" (144). Hwang also told reporters that an extensive network of moles existed in the South that regularly sent intelligence reports back to North Korea and worked extensively at fomenting social turmoil in the South. News of this type alarmed the citizens of South Korea and sparked an intensive search for North Korean spies in the South. Hwang had already caused heightened concern on 22 April 1997, when he revealed that North Korea had nuclear and chemical weapons capable of "scorching" South Korea and Japan (145). In the 1997 edition of the US Department of Defense Report, *Proliferation: Threat and Response*, Secretary of Defense William S. Cohen noted that "North Korea has substantial NBC weapons and missile capabilities" and that "North Korea supplies missiles and missile-related technology to countries in the Middle East" (146). In line with this, in the *Annual Defense Report for 1997*, Secretary Cohen maintained that "the United States today must plan for the more likely scenario of fighting and winning [a] potential regional conflict in Korea" (147). North Korea is still regarded as a realistic threat to South Korea. This case study will highlight the salient features of North Korean missile development as part of the background leading to SAM-X.

On 8 October 1997, in an apparent effort to instill public confidence, ROKAF Chief of Staff Lee Kwang-hak announced that the ROKAF would establish an early-warning alarm system by December of the same year to fend off a potential North Korean Scud missile attack. He also stated that he was aggressively promoting the introduction

of short-distance radar bases and a next-generation surface-to-air missile defense system, known as the SAM-X project (148). In order to achieve this capability, the ROK would have to either develop it indigenously or turn to the international arms market and select an appropriate arms contractor. In the following paragraphs, background determinants which have shaped events leading up to this decision and its implementation will be examined. Background determinants include the MTCR, ROK missile acquisition and indigenous development, North Korean missile development, and US initiatives with TMD.

The Missile Technology Control Regime

The MTCR was created in 1987 as an informal export control arrangement by the G-7 governments of the US, Britain, Canada, Japan, then West Germany, Italy, and France (149, 150). Unlike a treaty or international agreement, the MTCR is a voluntary arrangement whose guidelines prohibit the sale or transfer of "Category I" and "Category II" technologies. Essentially, members pledge to adhere to the regime's export guidelines and restrict export of items contained in the regime's annex. The idea for the regime grew out of mutual fears by the G-7 governments that "rogue" states might acquire missiles or offensive missile technology for use as weapons of terror. Today, the regime has expanded to include 29 members. It operates by consensus, and members are required to incorporate the terms of the MTCR into their respective systems of national export control (150, 151, 152).

The Annex of the MTCR is divided into two main categories: Category I and Category II. Category I includes all finished missile and unmanned aerial vehicle

systems (with the focus and intent to cover full up ballistic and cruise missile systems) that exceed the MTCR payload and range requirements of 500 kilograms (1,100 pounds) and 300 kilometers (186 miles), respectively. Category II items include materials, components, machinery, and other technologies that could aid in the design, development, testing, and production of systems that could deliver nuclear, chemical, or biological weapons (150, 151, 152).

Although there are no official sanctions mandated by the MTCR, members are required to implement its terms into their respective national legislation (150). Applicable US laws that enforce the MTCR include the Arms Export Control Act, as amended, and the Export Administration Act, as amended by the 1990 Missile Control Act. Depending on the nature of a violation committed by an offending state, US federal law might require action. Category I transfers which violate the regime's guidelines require that all US Government contracts and export licenses to the "sanctioned entity" be denied for at least two years. Sanctions apply to both the importer and exporter of items controlled by the MTCR, although member-states cannot be sanctioned unless they fail to take "adequate investigative or enforcement action" (150). For Category II transfers found to violate MTCR guidelines, US government contracts and export licenses for MTCR "annex items" to the "sanctioned entity" must be denied for at least two years.

Between 1991 and 1996, the US imposed MTCR-related import/export sanctions on seven separate occasions against China, India, Pakistan, Russia, Syria, South Africa, and North Korea. Lora Lumpe, Director of the Arms Sales Monitoring Project of the Federation of American Scientists, reported on the effectiveness of the MTCR:

Before the MTCR, governments and corporations exported short and medium-range missiles as freely as they do combat aircraft, armor, or naval equipment. But by 1992, former CIA Director Bob Gates testified that North Korea was the only remaining exporter of ballistic missiles [although allegations persisted four years later of Chinese exports]. In addition to curbing exports, the MTCR has curbed indigenous missile production by several developing countries. (152)

Members of the MTCR attend special meetings, take part in export control workshops, conduct work related to revising and updating the regime's guidelines and annex, and share intelligence on other nations' programs of proliferation (150). Meetings are scheduled out of a small office in the French Ministry of Foreign Affairs, which acts as the regime's point-of-contact. As there is no official secretariat, the regime's day-to-day activities are carried on by normal bilateral diplomatic relations. Membership decisions are made only by consensus from the regime's existing members. It is noteworthy that while all nations are encouraged to abide by the MTCR's terms, not all states have been invited to become formal members. There have been attempts by a number of non-member states to join the regime. Some non-members have gone so far as to make public and legislative commitments to adhere unilaterally to the guidelines and annex of the MTCR. Among these countries is South Korea. Ironically, South Korea's intention to join the regime has not been met with enthusiasm. The reason for this is that South Korea has indicated that it would use MTCR membership "as a basis to withdraw from an agreement with the United States that prevents Seoul from developing missile systems with ranges in excess of 180 kilometers" (153).

ROK Missile Acquisition and Indigenous Development

Despite a reversal of President Carter's decision to withdraw US troops from South Korea, some units were deactivated between 1977-82 (1:50-51). Among the units

to deactivate were the 38th Air Defense Artillery Brigade, which consisted of six Nike Hercules surface-to-air missiles (SAM) battalions and 12 Hawk SAM battalions, and the 4th Missile Command, which had a battalion of Honest John and Sergeant tactical surface-to-surface missiles (SSM). As part of the deactivation, these units transferred their equipment to the ROK Army.

At some point during the late 1970s, South Korea began to take steps to develop an indigenous manufacturing capability of missiles. It developed and deployed the "Hyonmu," which was based on a modified version of the Nike Hercules (83:7; 154). The Hyonmu had a range of 180 kilometers and a payload of 500 kilograms (155). In 1979, the ROK military began work on an extended-range Hyonmu. The intent behind production of this version was to develop a range capability of 260 kilometers, with a payload of 450 kilograms (155; 117). ROK initiatives in this endeavor were unilateral, as the US did not support the idea of an extended-range missile.

Concerned that development of a missile with a 260 kilometer range could launch a destabilizing missile race on the Korean Peninsula, US officials worked with South Korean counterparts to negotiate an agreement which would basically restrict such production. By 1990, a bilateral agreement in the form of a Memorandum of Understanding (MOU) was signed between the US and ROK. It was based on a prior agreement reached in 1979 limiting ROK missile development (156). Under the terms of the agreement, the ROK agreed to forgo plans to develop missiles beyond a range of 180 kilometers. In essence, this meant the ROK would scrap development of the extended-range Hyonmu. In exchange, the ROK received security assurances from the US, as well as "continued support for South Korea's shorter-range missile program" (117). Prior to

the 1990 agreement, in 1989, the US and ROK governments signed an MOU for cooperative research and development in missile guidance technology in the development of short-range SAMs. The signing of this MOU had come after a 1988 MOU signed by the US and ROK on defense technological/industrial cooperation (67:136).

During the 1995 annual security talks held between the US and ROK, South Korean officials made a formal request to abolish conditions of the 1990 bilateral missile control agreement in favor of full membership to the MTCR. Membership in the MTCR would permit South Korea to develop missiles capable of carrying a 500 kilogram payload up to a range of 300 kilometers, as opposed to the 1990 US-ROK agreement which limits indigenously produced missiles to a range of 180 kilometers. The MTCR only intended restrictions to apply to exports of missiles and related technology. However, the 300 kilometer, 500 kilogram restriction on indigenous development has become "a quid pro quo for US support of any new member of the regime" (117). A consensus to allow South Korean membership to the regime was not reached.

Again, in June 1996, during a two-day meeting concerning non-proliferation of missiles and other weapons of mass destruction, the ROK conveyed its wish to join the MTCR in an admitted effort to be permitted to develop missiles with a range of up to 300 kilometers (157). After the second day of discussions, *The Korea Times* reported that the ROK and US had agreed to revise the "bilateral arrangements on missiles to pave the way for Seoul to upgrade its missile capabilities and to facilitate the transfer of [US] technologies" (158). In addition, it was agreed that differences would be resolved over South Korea's entry into the MTCR. A South Korean official indicated that ROK assurances on continuing not to go through with development of the "Hyonmu" depended

on the US commitment to provide more missile-related technologies, indicating the ROK's desire for "a steady supply of US missile-related technologies and equipment" (158). The US side reportedly agreed "to look into the request."

On 3 December 1996, the Northeast Asia Peace and Security Network (NAPSET) quoted a *Washington Times* report whereby a US government official stated that "the ROK is developing long distance cruise missiles in violation of a 1979 (amended to the 1990 agreement) US-ROK treaty" (159). The report mentioned that US satellite surveillance spotted missile test activities in August 1996. The ROK would not "specifically admit or deny" allegations, but contended that "their missile forces were inferior to those of the DPRK, which they claimed had a cruise missile with a range of 998 kilometers" (160). On 4 December 1996, NAPSET quoted reports from a US State Department transcript of spokesman Nick Burns, and a South Korean daily newspaper, the *Chung-ang Ilbo*. In the State Department transcript, Burns would not comment on whether the US considered the ROK to be in compliance with the 1979 ROK-US agreement limiting missile development, but mentioned that "the two governments...share the objective of bringing the ROK into the MTCR" (161). The *Chung-ang Ilbo* reported that "the ROK Foreign Ministry denied reports by *The Washington Times* that the ROK was building long-range missiles in order to counter threats from the DPRK" (161). The paper also noted that the ROK viewed acceptance into the MTCR as critical to the future development of commercial rockets for the purpose of launching satellites, as MTCR members can share information on missile technology. However, there were "concerns over the reactions of Japan, the PRC, and other nations in the region to the ROK's participation in the MTCR" (161).

On 5 December 1996, the *Chosun Ilbo* reported that "a US government official said...that the US has given the ROK *de facto* approval for development of cruise missiles intended to counter DPRK threats....[and that] this approval was made indirectly through US backing of ROK membership in the MTCR" (162). On 6 December, the *Seoul Shinmun* supported the previous day's story by revealing that, "The US has recognized the need for the ROK to upgrade its missile development program. Washington has finally recognized that there existed an imbalance of missiles on the Korean Peninsula" (163). Ironically, the report admitted that the "two sides agreed to no clear adjustments, only to continue further consultations on the matter" (163). By 9 December, the issue appeared to put to rest. The US was willing to support the ROK's entry into the MTCR, however, as a condition for joining, it wanted a supplemental memorandum containing most of the provisions of the 1979 ROK-US agreement that limits the range of ROK indigenously produced missiles (164; 165).

In addition to attempts at developing or acquiring SSMs and related technologies, the ROK has taken steps to acquire and develop short-range SAMs. The Stockholm International Peace Research Institute (SIPRI) lists a ROK order of 67 French-made Crotale SAMs for 1989 (166). By early 1990, South Korea was developing a variant of the French Crotale (83:7). The project to modify the Crotale was carried out jointly by South Korea's Goldstar Precision Instruments (missile development), Daewoo Heavy Industries (systems integration), and Samsung (fire control and acquisition radar) with technical assistance from the French contractor, Thomson-CSF. On 27 October 1997, South Korea officially announced that it had successfully test-fired its first locally designed, short-range, surface-to air missile, the "Chonma" (Pegasus). In the official

announcement, officials disclosed that 12 domestic firms and one foreign firm were involved in the production of the Chonma, but did not name any of the companies (167).

In an interview with the *Korea Herald* on 1 December 1997, Jean-Marie Cojanot, defense attaché at the French embassy in Seoul openly discussed military cooperation between Paris and Seoul. When asked about the possibility for defense contracts with French companies, he stressed that one of the existing reasons for French involvement with South Korea was "the short-range ground-air (sic) protection program, called *Chongma* (sic)" (168). When asked, "Is Korea an important partner?" Cojanot replied, "Until now, the United States have (sic) provided most of the equipment [to South Korea]. But we know that our Korean partners want to diversify their sources. We have a role to play through our defense industry and a relationship based on trust developed by our governments."

It appears that in addition to the French Crotales, the ROK had been negotiating with the US over the sale of Stinger missiles. Among the items identified as potential defense sales by the *Washington Post* in 1990 were 1,600 shoulder-fired Stinger missiles to South Korea (169). However, "In 1990, Washington was very hesitant about selling its Stinger missiles to [South] Korea" (170). Delays involving congressional approval caused the ROK to turn to France, and a purchase order for 984 French Mistral missiles was submitted (170; 171). To date, the SIPRI arms transfers data base lists the confirmed delivery of 800 missiles received from the original order (171).

South Korea again indicated its desire to purchase a large number of shoulder-fired SAMs in 1997. This time however, the ROK formally announced through its Defense Ministry that the ROK would make the purchase from either the US, France,

Great Britain, or Russia (170). On 10 June 1997 the Pentagon announced the planned "sale" of 1,065 Stinger antiaircraft missiles and 213 launchers to South Korea for an estimated \$307 million. In addition, the sale was expected to "be completed without objection from Congress" as it "would enable the Korean Army to develop a defense capability with an ability (sic) to protect itself from unwarranted aggression from the air as well as enhance its interoperability with US forces" (172). However, despite the US announcement, on 11 June, the *Yonhap* news agency reported that the (South Korean) "Defense Ministry [was still] debating between the Stinger missile, the French-made Mistral, and the British Starburst" (173). On 20 October 1997, the ROK Defense Ministry announced that it would purchase 1,000 French-made Mistrals over US Stingers and British Starburst missiles "in a \$300 million project to procure portable surface-to-air missiles" (154). The announcement came one week before South Korea test-fired their indigenously produced "Chonma," whose design was based on the French-made Crotale. This gave the ROK their first indigenous SAM capability against the growing ballistic missile threat from North Korea.

North Korean Missile Development

The stimulus for the previously mentioned indigenous missile development activity on the part of the ROK has been the relentless progress made by North Korea with their ballistic missile programs. Secretary Cohen described the North Korean agenda in the 1997 edition of the US Department of Defense Report, *Proliferation: Threat and Response*:

Since the 1950s, Pyongyang's defense programs have been aimed at developing a strong military force designed to preserve its regime, provide political leverage, and reunify the peninsula. The development of its NBC weapon and ballistic missile capabilities is viewed by Pyongyang as an important means of augmenting its large conventional land forces in the event of a conflict on the peninsula. (146)

On 21 October 1997, two high-level defectors from North Korea addressed the US Senate Subcommittee on International Security and Proliferation, and Federal Services, Committee on government affairs. Young-hwan Ko had served in the Ministry of Foreign Affairs in North Korea from 1978 to 1991, and Colonel Ju-hwal Choi had served in the Korean People's Army from 1968 to 1995. According to Ko, North Korean President Kim Il-song recognized in 1965 that "it was imperative for us to develop rockets...if war breaks out, the US and Japan will also be involved. In order to prevent their involvement, we have to be able to produce rockets which fly as far as Japan" (174).

In 1969, North Korea received its first Frog-7s and 60-km range Frog-5 tactical rockets from the Soviet Union (175). After the Soviets refused to supply them with "Scud B" missiles, North Korea initiated a program of reverse engineering Frog-7A's obtained during the 1970s. After a failed attempt at jointly producing a 600 kilometer-range ballistic missile with the PRC, North Korea began looking elsewhere for assistance. In 1981, North Korea obtained a small number of Scud-Bs from Egypt, and immediately began to reverse engineer them (97:184; 96). By 1984, North Korea began flight-tests of their indigenous version of the Scud-B, and began exporting it in 1986 (96). According to Ko, Iran, Syria, Egypt, and Libya are North Korea's largest customers, and missile exports make up the largest portion of North Korea's total export volume (174).

In addition to the scuds, North Korea currently has the "Nodong 1" in its possession. North Korea conducted a successful test of the Nodong 1 in 1993 over the

Sea of Japan. With a range of at least 1000 and possibly up to 1300 kilometers, the Nodong 1 covers a "wide swath of cities from Tokyo to Taipei" (175). North Korea is also working towards successful test-firing of the Nodong 2, with a range of 1,500 kilometers; the Taepo Dong 1, with a range of 2,000 kilometers; and the Taepo Dong 2, with a range of 4000-6000 kilometers (96). Although successful test-firings are not anticipated for some time, once the Taepo Dong 2 is deployed, "this missile will be able to range the US airbase at Guam and the critical early warning radar site at Shemya. It may also be able to hit the Prudhoe Bay oil fields east of Point Barrow, Alaska as well as the population and military centers at Anchorage and Fairbanks" (176). The two North Korean defectors who testified before a US congressional panel, Ko and Choi, acknowledged that in wartime, North Korea had plans to "target US forces and bases in South Korea and Japan, and eventually Guam and Alaska" (174).

At what appeared to be a growing threat from North Korea, senior US and North Korean officials began negotiations in April 1996. The talks were "the opening stage of what could become formal US negotiations with the communist regime aimed at shutting down the North Korean missile program" (177). However, on 28 August 1997, North Korea called off all missile-related talks after the US offered to accept two high-level defectors, "North Korea's Ambassador to Egypt, Chang Sung-gil, and his Paris-based diplomat brother Chang Sung-ho" (178).

Concerns regarding North Korea's missile program have been echoed by members of the US House of Representatives. On 19 May 1998, Representative Don Young (R-AK) introduced House Concurrent Resolution No. 278, "The All-American

Resolution" (179; 180). The legislation expressed the idea that "any missile defense system deployed to protect the United States against the threat of ballistic missile attack should include protection for Alaska, Hawaii, the territories and the commonwealths of the United States on the same basis as the contiguous States" (179). The resolution was a reaction to a 1995 national intelligence estimate (NIE) whereby "the Administration [was] asserting that the U.S. did not face a threat of missile attack for at least 15 years...[and subsequently] excluded from the NIE an assessment of the threat of missile attack to Alaska and Hawaii (sic)" (179). The missile defense system in question was the National Missile Defense (NMD) system, which the "Administration is committed to developing by the year 2000" that "could be deployed as soon as 2003" (181). The NMD is the second priority under the Department of Defense Ballistic Missile Defense (BMD) program. The first priority under the program is "to provide effective theater missile defenses (TMD) against short-range missile threats we face today in the Middle East and Asia" (181). Among the TMD core programs is the Patriot Advanced Capability-3 (PAC-3) missile, intended as a lower-tier system that builds on the existing Patriot missile defense infrastructure (182; 183).

US Initiatives under TMD

On 13 May 1993, Secretary of Defense Les Aspin formally announced that the name of the Strategic Defense Initiative Organization, started under President Ronald Reagan in 1983, was changed to the "Ballistic Missile Defense Organization" (BMDO). The name change reflected the changing threat from the Cold War stand-off with the Soviet Union to a new threat involving the spread of ballistic missile technology and

weapons of mass destruction throughout the world. The BMDO's new charter, one inspired from the Bottom-up Review ordered by Secretary Aspin, called for the involvement of Department of Defense (DoD) warfighting commands to become directly involved in planning for the integration of missile defense systems into operational units. Another significant aspect of the charter called for "injecting new technology" into systems already deployed (184). Among BMDO-funded achievements has been the development of the Extended Range Interceptor (ERINT), the first noted "application of hit-to-kill" in an operational surface-to-air system. "In 1994, the US Army selected ERINT to be used in the Patriot Advanced Capability-3 (PAC-3) program" (184).

The BMDO is charged with the responsibility of "managing, directing, and executing the Ballistic Missile Defense (BMD) program" (185). The BMD program "focuses on three areas: Theater Missile Defense (TMD), National Missile Defense (NMD), and advanced ballistic missile defense technologies." According to Secretary of Defense William S. Cohen, in the 1998 *Annual Report to the President and the Congress*, "The Department's first missile defense priority is to develop, procure, and deploy theater air and missile defense (TMD) systems to protect forward-deployed elements of the US armed forces, as well as allies and friends" (186). TMD systems "must be able to deploy rapidly and move with the troops" (187).

As the TMD is "diverse with respect to range and capability, no single system can perform the entire TMD mission" (187). Thus, a "family of systems" approach has been adopted to counter the TMD threat. This approach utilizes "those systems that intercept at relatively low altitudes within the atmosphere (lower-tier) and those that intercept missiles outside the atmosphere and at longer ranges." According to Secretary Cohen,

"Lower-tier systems remain a top priority to defeat shorter range ballistic and cruise missiles. The PAC-3 and Navy Area program (Aegis-related systems) are the core lower-tier systems" (186). The upper-tier system consists of the Theater High Altitude Area Defense (THAAD) and the Navy Theater Wide (also Aegis-related). Secretary Cohen referred to the NMD as "the second priority of the BMD program" (186). The Patriot PAC-3 and Navy Area lower-tier systems were due to be fielded sometime in 1998, while the NMD system is expected to be developed by 2000 and deployed possibly as early as 2003 (181). THAAD, deployable possibly by 2000 or 2001, would most likely "provide the technological basis for the NMD system" (183).

The Senate Missile Defense Act of 1995, Sec. 233 outlines "Missile Defense Policy" of the US. It outlines six policy items, the first of which is "It is the policy of the United States to deploy as soon as possible highly effective TMDs capable of countering existing and emerging theater ballistic missiles" (187). Sec. 234, "Theater Missile Defense Architecture," begins "(a) *Establishment of Core Program*: To implement the policy established in section 233, the Secretary of Defense shall establish a top priority core theater missile defense program consisting of the following systems: (1) The Patriot PAC-3 system, which shall have a first unit equipped in fiscal year 1998" (187).

As primary lower-tier system in the TMD system, the Patriot PAC-3 is "an entirely new missile, derived from the ERINT interceptor...and fired from the same launcher as earlier versions of Patriot" (188). A Foreign Broadcast Information Service article taken from the *Seoul SISA Journal* describes the significance of the ERINT-capable Patriot missile:

The ERINT missile is designed to intercept enemy missiles loaded with nuclear and biochemical weapons. The motive for developing ERINT was to reduce damage to friendly forces by containing the radioactivity and biochemical elements contained in the enemy missile warheads from spreading due to the enormous energy by the collision of the two missiles. Because North Korea possesses nuclear and biochemical weapons, the ROK Air Force wants to have surface-to-air missiles which are capable of loading ERINT missiles. (12)

On 31 January 1994, *Defense News* reported that President Bill Clinton was considering a request by Army General Gary Luck, US Forces Korea Commander, "to deploy the latest versions of the PAC-2 Patriot at airfields, ports, and areas around Seoul" (189). The article noted that US officials wanted South Korea "to take similar steps to accelerate procurement plans of the US-made system." US Undersecretary of Defense for Policy, Frank Wisner, was quoted as saying, "We are encouraging the South Koreans to consider strengthening their antimissile defenses and the Patriot is the best system we have at the moment." In addition, a US diplomat said, "John Deutch, the Pentagon's undersecretary for acquisition and technology, proposed that South Korea join the United States in theater missile defense (TMD) development efforts." The article also indicated that preliminary negotiations between the South Korean Ministry of Defense and Raytheon Co., producer of the Patriot, had been going on since early 1993. However, South Korea had yet to submit a letter of request to the US government. US government and industry sources were said to have figured that "South Korea has a requirement to acquire about seven Patriot batteries at a cost of approximately \$600 million" (189). Raytheon spokesman Dick Sherman acknowledged that "company and US Army officials [had] said that South Korea needs Patriot, and that the South Korean government had expressed interest in the system." Sherman was "confident, that in the near term they will be acquiring Patriot systems."

On 28 February 1994, South Korean Defense Minister Rhee Byoung-tae was reported to have said that "South Korea has no plans to purchase Patriot antimissile batteries ...from the United States" (190). Rhee "denied charges from opposition lawmakers that a possible Patriot deployment [being consider by President Clinton] is part of a long-term scheme to sell them to South Korea." Rhee admitted that "the ministry is studying the possibility of participating in the theater missile defense (TMD) program with the United States," but that it was "inappropriate to connect that program with the possible Patriot deployment." Rhee went on to disclose that "his ministry is preparing a strategy to neutralize North Korean scud missiles using air power while the missiles are still on the ground," and that the "US Patriot deployment plan is just one facet of this strategy."

On 22 March 1994, it was reported that President Clinton had "ordered a battalion of Patriot missile interceptors (be) shipped to South Korea, calling on North Korea to "do the right thing" by allowing international inspection of a laboratory capable of producing plutonium for nuclear arms" (191). The article reported that "the launchers [would be] shipped by rail from Fort Bliss, Texas, to Oakland, and then to South Korea on two military cargo vessels in a voyage that [would] take nearly a month" (191). On 18 April 1994, Patriot missiles began arriving at the South Korean port of Yusan (192).

In a 16 May memorandum to the Secretary of Defense entitled "Theater Missile Defense Cooperation with the Allies" (Presidential Determination No. 94-24), President Clinton wrote the following:

Pursuant to the authority vested in me by the National Defense Authorization Act for Fiscal Year 1994, Public Law 103-160, I hereby certify that the Director, Ballistic Missile Defense Organization, has formally submitted to representatives

of the member nations of the North Atlantic Treaty Organization and Japan, Israel, and South Korea a proposal concerning coordination of the development and implementation of US Theater Missile Defense (TMD) programs with TMD programs of our friends and allies. You are hereby authorized and directed to notify the Congress of this determination and to publish it in the Federal Register. (193)

On 30 September 1994, the *Korea Herald* reported that "US Forces Korea (USFK) [had] introduced the theater missile defense (TMD) plan, which [was being] promoted jointly by the United States and Japan, to improve its air defense capability against North Korean aircraft and missile attack" (194). The report pointed out the USFK had "already set up" a joint tactical ground station (JTAGS) as part of the TMD plan. JTAGS, they reported, "is capable of sending information on enemy aerial attack reconnaissance satellites to patriot air defense missile launchers, enabling them to intercept enemy missiles within one minute" (194).

On 23 January 1995 *Defense News* reported that General John Shalikashvili, US Joint Chiefs of Staff Chairman, said, "The US is willing to share intelligence from satellite data with Japan if the two countries jointly develop a theater missile defense system" (195). The article explained that Japan, faced with the North Korean ballistic missile threat, had their Defense Agency studying ways to develop missile defense in concert with the US Department of Defense. Four options were on the table:

- (1) A system designed to address the North Korean threat using Aegis destroyers and a fleet of Airborne Warning and Control System (AWACS) aircraft as well as 24 Patriot missile bases.
- (2) A system to address the North Korean and Chinese threats with Aegis destroyers, Patriot missile bases and AWACS aircraft.
- (3) Another system designed to counter North Korean and Chinese missiles using Theater High Altitude Area Defense (THAAD) missiles, Patriot bases, and AWACS aircraft.
- (4) A plan to intercept North Korean and Chinese ballistic missiles with a combination of Aegis ships, Patriot bases, and THAAD missiles.

The plans would range in cost from \$4 billion to \$15 billion through 2005. (195)

The article closed with a comment from a Japanese industry source stating, "We have been noting that the United States is getting increasingly active in trying to sell joint development, but we never thought they were this enthusiastic" (195).

On 21 August 1995, *Defense News* acknowledged that Taiwan, which had already received US Patriot Modified Air Defense System (MADS) and was working on an indigenous version of the Patriot PAC-3 called the "Tien Kung," was "assessing the US Army's Theater High Altitude Air Defense (THAAD)" (196). Doug Graham, director of defense and international marketing at Lockheed Martin Space and Strategic Missiles, was quoted as saying, "Taiwan has always been on our short list of potential customers for THAAD" (196).

On 11 September 1995, *Defense News* reported that Japan and Taiwan were both showing interest in US systems. South Korea, however, was "considering Russian offers to jointly manufacture the S-300 antimissile system" (197). Japan was, in fact, "accelerating missile defense studies that (were) expected to lead to joint development with the United States of a theater missile defense system," while "Taiwan was showing interest in the US THAAD system" (197). The article also mentioned that Taiwan was "planning to field the MADS (modified version of the Patriot), ...(which) involves indigenous production of some components and minor subsystems" (197).

A Heritage Foundation news release on 24 October 1995, seemed to underscore bipartisan enthusiasm for the Asian missile defense issue:

America can best protect itself and its Asian allies against growing nuclear threats from China and North Korea by deploying as soon as possible both a national missile defense system for the continental United States, and theater missile

defenses to protect US naval and ground forces throughout the Pacific region. Japan, South Korea, and Australia should also be encouraged to buy and field their own American-made theater missile defense systems, while US officials also should pressure China to limit its offensive nuclear missiles in exchange for sharing US missile defense data. (198)

In May 1996, additional bipartisan support for an Asian regional TMD occurred when US Republican presidential candidate Bob Dole called for a "Pacific Democracy Defense Program that would extend TMD coverage to Japan, South Korea, Taiwan, and other allies" (199). Dole also "recommended export licensing of the theater high-altitude area defense (THAAD) system when it (would become) available and, in the interim, (make) operational prototypes available for the defence (sic) of America's Asian allies" (199).

In developments relating back to Japan, *Defense News* reported on 10 June 1996, that "The Pentagon [had] agreed to provide the Japanese Defense Agency (JDA) with early warning data collected by American spy satellites in yet another attempt to encourage Japan to move more rapidly toward deployment of antimissile defenses" (200). However, JDA officials said, "Washington's willingness to supply Tokyo early warning of missile launches in the region is part of what increasingly is perceived as US pressure for Japan to participate in joint development of a system to defend Japan from North Korean ballistic missiles" (200). Unidentified Japanese defense experts were quoted as stating that "US proposals to Japan should be accompanied by pledges to provide access to early-warning data obtained by the Defense Support Program satellites that detect infrared radiation at the time of the launch" (200). The reason is, "without access, the system never works. And the United States is the only country that has the data. That's why South Korea didn't ask to be supplied with its own Patriots" (200).

By 21 April 1997, the Japanese were "moving toward a commitment to acquire and deploy ballistic missile defenses, beginning with the US Army's planned Patriot Advanced Capability-3 (PAC-3) system" (201). According to government sources in the US and Japan, "Tokyo (was expected) to announce a final decision by summer's end" (201).

On 20 May 1997, *The Sydney Morning Herald* detailed a report that asserted "the United States [was] stepping up pressure on Japan to buy a multi-billion-dollar missile defence system to ward off attacks from China and North Korea" (202). The article noted that "US Defence Secretary, Mr. William Cohen, publicly urged Japan to adopt the theater missile defence (TMD) system in his first visit to Tokyo earlier [in the] year" (202). The article also explained that TMD plans had been leaked in Washington to the Japanese media to further pressure Japan for a commitment. "The TMD system detects missile launches with spy satellites, which in turn send signals to land- or sea-based anti-missile systems which intercept and destroy the missiles. TMD relies on improved versions of the Patriot missile system and AEGIS sea-based missiles" (202).

On 6 June 1997, the *The Nikkei Shimbun* reported that "the Japanese government [had] decided on 2 June to postpone its decision on whether to participate in the US-led theater missile defense (TMD) initiative" and that "Japan [would] continue studying the ballistic missile defense initiative in cooperation with the US" (203). *The Asahi Shimbun*, reported that "the Japanese government [had] told the new US Defense Secretary William S. Cohen last April that another three years may be needed before Japan can make a final decision on participation in the TMD initiative" (203).

By early 1997, it appeared that efforts to lay the foundation for US-led theater missiles defenses were making some level of progress. By this point, Japan, already in possession of an older version of the Patriot missile, had committed \$5 million in "seed" money for TMD research, but was balking on joining the US in the TMD initiative. The Taiwanese government had approved agreements allowing co-production between Taiwanese companies and Raytheon of a modified Patriot system, the Modified Air Defense System (MADS). In South Korea, Patriots had been deployed to protect US troops and military assets (199). However, unlike efforts in Taiwan and Japan, attempts to gain support from the South Korean government for a Patriot acquisition seemed to be moving slowly. The issue would become the center of an extremely sensitive and closely watched debate, bringing into question the legitimacy of the long-held reign of the US as chief weapons supplier to the ROK.

Competition and Controversy Surrounding the SAM-X Project

Although months before the time which the issue would explode into controversy, a 14 October 1996 article in *Defense News* would foreshadow the dilemma facing South Korea concerning the purchase of the country's air defense system. The article noted that the planned purchase of South Korea's air defense system (SAM-X) was "posing a political and economic dilemma for officials in Seoul who must choose between a tempting technology transfer and debt-reduction package from Moscow or the Patriot system supported by US political and military leaders" (204). The article explained that "Moscow-bases Rosvoorouzheniye [had] offered to sell up to six units of the Russian-built S-300 air defense missile system, including radars, launchers, command and control

facilities, missiles, technical support, and associated technology, for a nominal, yet undisclosed price" (204). The purchase (estimated at \$400 million) would also serve as a way for Russia to chip away at "Russia's outstanding debt with South Korea, [then] pegged at \$1.47 billion." The article quoted the vice president of Raytheon's missile and air defense systems as predicting a sale of Patriots to South Korea (despite the Russian offer) eventually yielding "more than \$1 billion to the dozens of US contractors involved in the Patriot missile program." Emphasizing interoperability, a Pentagon official noted that "there's a lot more than pure economic considerations. One must also consider the ability to operate jointly with US forces in the theater" (204).

Inside the Pentagon (20 March 1997) reported that South Korean consideration of Russian air defense systems was annoying the US. Re-emphasizing the issue of interoperability, a Pentagon official reported that "the Russian system lacks the identification friend-or-foe (IFF) capability that Western systems offer, and would be difficult to integrate with currently fielded US and allied air defense systems" (205).

On 3 April 1997, in a DoD background briefing regarding Secretary of Defense Cohen's upcoming trip to Asia, reporters brought up the question of whether the ROK intention of procuring Russian equipment would be brought up during meetings with the South Koreans. Stating his desire not to be misquoted, Secretary Cohen attempted to provide some perspective on the matter:

We know that there are some plans for the ROK to consider the possible purchase of surface-to-air missile from Russia. We have tried to make our case to the ROK government, not pressuring them but to make our case that we have a very strong interest because of our forward deployed forces that US and ROK equipment are interoperable, particularly in areas like surface-to-air missiles. And so we believe that this is a case where we hope that our Korean interlocutors will look at the

kinds of equipment that we have fielded and make a judgment that will lead to greater interoperability and perhaps would not cause a problem should, you know, God forbid, a conflict develop on the Korean peninsula. (206)

On whether the ROK was close to resolving the decision, Secretary Cohen explained that the US was still involved with the ROK in discussions over the issue of interoperability, "a discussion that's very straightforward...Koreans listen, and will make their decision. This is not a case of Yankee coming in and demanding" (206).

On 7 April 1997, in a statement by Russia's leading state-owned arms exporting company, Rosvoorouzheniye, Russia was planning to "export the weaponry [S-300 missile complex] to South Korea as part of the debt-repayment arrangement between Moscow and Seoul, of which the South Korean defence ministry has been informed" (218).

On 8 April 1997, *The Washington Post* reported that during an interview with reporters on a flight to Japan, Secretary Cohen warned that "It would not play well in Congress" if the ROK chose the Russian system (219). The article went on to quote Secretary Cohen as stating that "It would not be a good deal, I think, overall, ultimately for our relationship. It's important they stay with US equipment" (219). The article once again cited concern over interoperability, especially recognition of F-15 aircraft. The *Post* article concluded with a statement by the ROK national security adviser to South Korean President Kim Young Sam, Ban Ki Moon, "if Cohen had been concerned, 'he could have told us about it in our [previous] discussions,' and not brought it up in public comments to the media" (219). On the same day, the *Korea Times* published an article entitled, "US Warns ROK of Political Repercussions for Purchase of Russian SA-12 Missiles." The article supported the SA-12 (S-300) as being as "capable as any surface-

to-air missile in the US arsenal," and as being a way for the ROK to take "in kind payment against a US \$1.3 billion Russian debt with Seoul" (209). In another *Korea Times* article reported that same day, "Cohen's Remarks [on Missile] Deal Erode Support For His Seoul Visit," a senior official at the ROK Defense Ministry was quoted as saying, "I don't think Mr. Cohen was very diplomatic about the issue." The report went on to warn that "a sense of welcome among the ROK public [was] perhaps wearing thin for US Defense Secretary William Cohen" (209). A procurement official working in the ROK Ministry of National Defense was quoted as saying, "Korea had imported more than 80% of its overseas military procurement from the US. Considering the interoperability of its existing US weapons, Korea is likely to choose Patriots over S-300s. But Cohen made an open opposition to it, which appeared to unnecessarily set the Korean public against the US" (210).

By 11 April, the issue seemed to reach the boiling point. NAPSET carried an article from the *Korea Herald* entitled, "Cold-War Foes Bid For Missiles To South Korea; Ambassador Kunadze Says Russia Hopes For Chance For Fair Competition With US." In the report, Russian Ambassador to South Korea, George F. Kunadze "in a thinly veiled counterattack, accused the US of 'bullying a customer into buying the merchandise,' [adding that] sales should be considered on the basis of quality and not on price" (211). Kunadze also emphasized the proposed Russian sale as a "good way of paying back some of Russia's estimated US \$1.2 billion debt to the ROK" (209). On the issue of interoperability, Kunadze claimed that it would "not be difficult to make alterations to the system, without any additional cost, so that it will fit the existing South Korean command and control system" (209). In defense of the Russian system, Kunadze

said that the "SA-12 (or S-300V) ground-based air defense system is superior in range, accuracy, and deployment time, which are critical to the territorial features of the Korean Peninsula" (209). Finally, pulling no punches regarding this thoughts on Secretary Cohen, Kunadze remarked, "I hope our Korean friends will excuse the defense secretary for what is in my view a pardonless attempt to sell, to thrust on Korea, its missile" (212). Kunadze's remarks played perfectly into arousing the emotions of the South Korean public.

On 11 April, after Secretary Cohen's remarks and Ambassador Kunadze's counter-remarks, South Korean newspapers carried stories expressing the both the public's outrage and the political dilemma that lay ahead: *Chosun Ilbo*—"Missile Sales to the ROK: US, Russia in Emotional Confrontation {Secretary Cohen: Buy Patriots! Ambassador Kunadze: Don't be Forced to Buy American!} (213)"; *Tong-A Ilbo*—"Secretary Cohen, Why Have You Come? Promoting Patriot Sales with North Korea as Moral Justification {Secret Demands not to Buy Russian Missiles} (214)"; *Hanguk Ilbo*—"Reconfirming the Importance of the Mutual System Against North Korea: Self-restraint Measures Taken [by ROK government] Regarding the Public's Opinion on Missile Purchases" (215).

In a nutshell, without necessarily meaning to do so, Secretary Cohen made remarks that were construed by the South Korean media, as well as the public, as being bully-like, even threatening ["Won't play well in Congress"]. The Russian ambassador skillfully exploited South Korean sensitivities, sensitivities that, especially in the ROK-US relationship, run deep. De Mente supports this notion:

While virtually all Koreans, particularly those born before 1950, are imbued with the traditional Confucian principles of strict order and obedience to authority, they are also influenced by a growing concept of political democracy mixed with strong nationalistic feelings and a tendency toward extremely emotional, violent actions in support of their beliefs. These strongly nationalistic feelings and raw emotionalism, fed by a long memory of foreign domination and exploitation, make Koreans especially sensitive to criticism or pressure...Korean news media have exacerbated this situation in the past by strident attacks against the US. (216)

Due largely to Kunadze's stinging counter-attacks to Secretary Cohen's remarks and the South Korean media coverage on the issue, resentment built up quickly, as did opposition to purchasing the Patriot missile. The Russian S-300 became the more publicly favored option, as a purchase of this system would not portray the ROK in an obsequious light.

In 1994, ROK Defense Minister Rhee Byoung-tae had "denied charges from South Korean opposition lawmakers that a possible Patriot deployment (being considered by President Clinton at the time) [was] part of a long-term scheme to sell them to South Korea" (190). This shows that politically, members of the ROK legislative system had long since drummed up negative support for showing any appearance that the ROK would play into the broader plan of the US TMD initiative.

What made the situation possibly even more potentially explosive was the fact that, for all intents and purposes, the Russians appeared to be offering what looked to be a win-win deal. The ROK would get a good, and inexpensive, technology transfer package, and get back a portion of its loan to Russia, thus remedying some of the bad feelings between the two countries. The benefits would come to Russia in the form of loan repayment and as a means to carve out a niche in a US-dominated arms market. In the South Korean public's mind, the appearance of the US blocking a potentially very

beneficial package deal for the ROK stood in the way of the ROK's autonomy to act in its own best interest.

Although the issue erupted in the newspapers and became a hot national issue for the ROK in April, a competition between Russia and the US had apparently been going on for some time. After the Patriot PAC-2 was deployed to the US Eighth Army in the ROK in 1994, "Raytheon [had] been able to show actual samples to relevant ROK Air Force officials" (12). With its Seoul branch office within blocks from US Eight Army Headquarters, in Yongsan, Seoul, Raytheon was "in a more advantageous position than [Russia]" and has been "carrying out an intensive and large-scale advertising campaign advertising the company (sic)" (12). Not to be outdone, the Russian state-run weapons export company, Rosvoorouzheniye, by April 1997, had established a branch office in Seoul, as well. In its campaign efforts, Russia has emphasized the cheap price of the S-300 in an attempt "to appeal to the ROK people's anti-US sentiment evoked by the high prices of US weapons" (12).

Another aspect of business conducted behind the scenes involved preferences of the huge South Korean conglomerates, the *chaebol*. Analysis in an April Foreign Broadcast Information Service report concerning a project with the magnitude of a missile defense system described goings-on in ROK business circles:

The "L" precision company [probably "Lucky-Goldstar"], which produces missile parts and carries out assembly-production of radars, is planning to introduce technology for the Patriot's IG (sic) radar, and exchanged a memorandum of the plan with Raytheon. Meanwhile, "S" Electronics (probably "Samsung"), a rival of "L" precision, is supporting [the] S-300 in cooperation with Russia. (12)

After intense in-country marketing efforts, the sales promotion campaign appeared to have developed into high level confrontation by the time Secretary Cohen made his April trip. After Secretary Cohen commented on the possibility that if the ROK Air Force went with Russian S-300s, the "ROK Air Force would be unable to distinguish friendly airplanes from those of the enemy" and "might shoot down US airplanes by mistake," a high-level Russian response was quick. Russian Ambassador Kunadze "sternly denounced the remarks as 'brazen and unscrupulous acts' intended to sell US weapons in a forcible manner" (12).

By July 1997, with an economic crisis looming on ROK's horizon, the issue began to die down. On 26 July 1997, *Pacific Stars & Stripes* quoted a *Korea Herald* report which said that the South Korean "Defense Ministry will delay buying a new air-defense missile system until 1999 because of budget limitations" (217). Indeed, the reason for delaying the program may well have been for economic problems alone. However, analysis of the situation back in April 1997, predicted the possible postponement of the decision by the incumbent ROK government:

On many occasions, the large-size project, such as introduction of the surface-to-air missile, is to be decided in accordance with political reasons. As such, some analysts observe that since the incumbent civilian government is suffering from its authority waning at the end of its tenure, the present government may postpone its decision on the type of missiles and turn over the rights to the final decision to the next government. (12)

Conclusion

The SAM-X project is part of an extensive air defense program involving the deployment of expensive SAM batteries. The program represents opportunities and

challenges for ROK attempts at indigenous development. It also represents an opportunity for a big weapons sale for the appropriate bidder. With this comes the inherent competition between market rivals, replete with all the behind-the-scenes maneuvering required to "get the sale." This time, however, the rivals vying for a the opportunity to sell to the traditional American ally are the US and Russia, both of which are two of today's undisputed leading international arms competitors.

Perhaps the greatest challenge in this scenario of procurement of a major off-shore weapons system by the ROK government with open competition from competing rivals is a test of the ROK's ability to handle the pressures that come with attempts to influence decision making by competitors. The "test" being whether the ROK's formal acquisition process is adequate for the pressures and demands being placed on it from outside competitors, i.e., the ROK's ability to take control in an auction-like environment. The case shows that the ROK may not have been forthcoming with its requirements. The idea of a sophisticated SAM system appeared to shift from a critical defense asset to an expedient way to acquire technology and/or receive repayment in kind from the Russians, then back to a critical, but economically infeasible asset. For this reason, ROK intentions were not clear, and could have been misinterpreted by its bidders.

One thing that the case did seem to spell out was that the ROK government was much more influential in the decision than the ROK military, another sign of the ROK's political progress. The ROK was extremely concerned over public opinion during Secretary Cohen's visit, and admittedly was reluctant to make a politically unpopular decision. Because of the ease of integration with existing systems, and the comfort-level

enjoyed by the ROK military with US systems, it can almost be certain that the military would prefer the US-made Patriot.

Most importantly, this case represents the possible development of a new era defining the weapons acquisition relationship between the US and the ROK. Unlike the *de facto* supplier-recipient relationship of the past, where supplier control mechanisms were firmly in place, the SAM-X represents a relationship which possibly parallels more closely a customer-supplier relationship. From the case, a conflict clearly existed between US plans for TMDs, and the ROK's national pursuit of its own defense industry. With reunification predicted by many to happen within a few years, the ROK may have plans that no longer fit in the bilateral framework that evolved during the Cold War. Underscoring this is the fact that although "negotiations" over Patriots had been going on since 1994, the SAM-X wasn't formally announced until 8 October 1997. This was two months after the final SAM-X procurement decision was put on hold until 1999, and two weeks before the switch from US Stingers to French-made Mistrals. A week after the Mistral announcement, the ROK released news to national and international press that it had indigenously produced [with the assistance of France] its own shoulder-fired SAM, the Chonma. For this reason, it is possible that the ROK intends to complete the SAM-X as an indigenous effort, or seek continued technical assistance from France to avoid the US-Russian entanglement.

V. ROK Weapon Systems Acquisition Process

Chapter Overview

The purpose of this chapter is to furnish information on the Republic of Korea's (ROK) weapon systems acquisition process as a reference for interpreting and enhancing the validity of the thesis research effort. Information documented in the literature review (Chapter III) and presented in the SAM-X case study (Chapter IV) can be screened against, and compared to the formal process outlined in this chapter.

Represented in this chapter are the end efforts which have resulted in the development of a ROK-unique process for acquiring weapons and weapons technology. For sophisticated weapons and weapons technology, the ROK's approach to acquisition has evolved in an environment characterized by a high degree of dependency on offshore suppliers. Unlike countries such as the US, France, or Russia, where defense contracts for new and sophisticated weapons are routinely granted to respective domestic defense contractors, the ROK must solicit offshore suppliers for defense contract proposals. In simple terms, the ROK must "go where the technology is" for sophisticated weaponry. This is an important feature of the SAM-X project. In order to acquire an air defense capability of the magnitude necessary to meet its defense requirements, the ROK turned to two of the world's major producers of sophisticated surface-to-air missiles. Another important aspect of the SAM-X case involves acquisition of technology.

Countries with the capability of producing technologically sophisticated weapons such as the US can concentrate on balancing program requirements with program costs, while ensuring an environment of open and fair competition among prospective domestic

contractors. In the case of ROK offshore solicitation, there is a greater proclivity for the ROK to balance program requirements with the potential for obtaining sophisticated technology rather than with program costs. As a result, the elements of fair and open competition have not been a traditional aspect of the ROK's acquisition process. However, as this chapter will show, the ROK has recognized the importance of a more open and transparent acquisition process. The case of the SAM-X highlights the difficulty the ROK had in controlling fallout resulting from head on competition by the US and Russia in a reformed, more open ROK acquisition environment. Thus, the case of the SAM-X is as much a test of the ROK's reformed acquisition process as it is a test of US-ROK relations.

In addition to presenting the ROK's weapons acquisition process, this chapter will provide some background information on events and issues that have led to the current acquisition process. A description of the key players associated with the process and its implementation will also be presented. Much of the information presented in this chapter comes from papers and presentations conducted by Major Tony Harrison, Chief, ROK Ministry of National Defense Liaison Office/Joint US Military Affairs Group-Korea (JUSMAG-K). In addition, the chapter was reviewed and validated by Mr. Kang, Haeng Jung, Director General, International Cooperation Division, Acquisition and Development Bureau, ROK Ministry of National Defense. Mr. Kang is currently on assignment as the International Cooperative Acquisition Chair, Executive Institute, Defense Systems Management College.

Background

When Kim Young Sam (the first ROK ruler in 32 years who was not a former army general) was elected president of the ROK on 18 December 1992, an era of reform was ushered into Korean government and industry. In his inaugural remarks on 25 February 1993, President Kim vowed publicly to fight corruption in the public and private spheres. Within his first few months in office, President Kim unleashed a hard hitting campaign of reform. Kim's anti-corruption efforts extended to the military (101).

A target for Kim was the *Yulgok* defense procurement program. The *Yulgok* program originally began on 19 April 1973. It was intended to "reduce foreign dependence through domestic production of conventional weapons" (82:157). Kim ordered an investigation of the program in April 1993. Until then, the program had not been subject to an audit for 19 years. "The men in charge of the enormous defence (sic) budget (one-third of government spending during the 1970s and 1980s) did not have to give details of what they were buying either to the National Assembly or to the public" (120:36). As a result of the investigation, "39 generals were sacked, reprimanded, or jailed" (120:36).

Soon after taking office in October 1996, ROK Defense Minister, Kim Dong Jin, replied swiftly to inquiries from the ROK National Assembly lawmakers regarding defense-related irregularities. With the goal of isolating and eradicating these irregularities, and in order to restore the public trust, he ordered the revision of various defense-related processes. Accordingly, the Ministry of National Defense (MND) established a committee (the Defense Acquisition Procedures Improvement Study Committee, commissioned in November 1996) to pursue acquisition reform. As one of

the results of the committee's findings, ROK MND Directive 557, Weapon Systems Acquisition Management Regulation (19 May 1997) was created. This regulation governs procedures concerning ROK weapon systems acquisition process. Its intention is to apply open procedures to related agencies and personnel so that MND can ensure greater visibility of the weapon systems acquisition process (218).

ROK Acquisition Process Overview

The ROK acquisition process is composed of five major elements:

(1) requirements determination phase; (2) test and evaluation (T&E) phase; (3) negotiation phase; (4) selection of weapon system and award; and (5) budgeting (219).

A brief description of each element is provided as a cursory overview of the ROK acquisition process. Each element is expanded upon later in the chapter.

1. Requirements Determination Phase. This phase consists of requirements generation from service components to the ROK Joint Chiefs of Staff (JCS), Directorates for Strategic Planning and Force Planning. Service components take into account the function of the weapon system within the theater, performance notification requirements, and required operational capabilities (ROC). ROCs are translated into plans and reviewed by various JCS councils (the ROC is similar to the operational requirements document [ORD] used in the US acquisition process which identifies minimum acceptable requirements used to define system capabilities needed to satisfy mission needs) (218; 219).

After determination of a ROC, an announcement is issued from the JCS for solicitation of an acquisition program. Once the Central Directorate, Test and Evaluation

in the JCS has evaluated data from eligible firms interested in the program, a request for proposal (RFP) is developed and sent to potential candidates.

2. T&E Phase. This phase consists of (1) Pre-T&E and ; and (2) T&E. In Pre-T&E, data is gathered and information is provided to the Required Service Components (RSC) and other T&E agencies to be used in determining which weapon systems will be selected as candidates for acquisition. In actual T&E, decision-makers are provided with critical information needed to determine which system to negotiate for acquisition. Based on T&E results and guidance from MND, the Defense Procurement Agency (DPA) will negotiate with competitors (218).

3. Negotiation Phase. Based on information provided by the DPA, a decision is made as to whether the system will be indigenously developed, purchased off-shore, or acquired through some combination of the two. The decision is made in the following order by the following councils: the Working Level Acquisition Review Council (WLARC), the Acquisition Review Council (ARC), and then the Expanded Acquisition Review Council (EARC) (218).

4. Weapons Systems Selection and Award. Comparative evaluation of each candidate system is conducted by the Acquisition Development Office (ADO) based on T&E results submitted by the JCS, and results of the negotiation for procurement submitted by the DPA. Based on this evaluation, a proposal is sent through various MND councils to the to the Defense Minister as final decision maker for approval. The Minister's approval is then turned into a decision to award and then a contract is concluded for the selected equipment (218; 219).

5. Budgeting. To meet funding authorization, the proposal must be scrutinized by the Defense Improvement Committee (DIC). The DIC is an interministerial committee charged with finding "ways and means" of implementing aspects of the Defense Improvement Program (DIP) in concert with government policies, vis-a-vis domestic defense industry and the development of indigenous technological capabilities. Results from the DIC are submitted to the ADO at the startup of weapons systems selection. If results from the DIC are favorable, the proposal is signed by the Defense Minister, the National Assembly grants funding authorization, and the weapon system is budgeted for and placed in the DIP (218).

Before examining each phase of the process in depth, a section describing the key players involved in the ROK acquisition process will be provided.

Key Players in the ROK Acquisition Process

The three major players in the ROK acquisition process are (1) the ROK President; (2) the National Assembly; and (3) the Defense Minister. The President reviews all major programs. This review has become an increasingly important measure of public assurance, due to results generated from the outcome of the Defense Acquisition Procedure Improvement Study and subsequent calls for acquisition reform (219).

The National Assembly, is charged with debating *all* Force Improvement Plan acquisitions and approving all defense procurement actions costing more than US \$1.25 billion. Much like the US Congress, the National Assembly has the power to delete, amend, and insert items and projects. As threat perceptions and regional economic and

security perspectives change and domestic pressure increases, and in light of acquisition reforms, the Assembly will most likely subject the defense budget to increased scrutiny (219).

The Defense Minister approves all decisions for major acquisitions (major ROK programs are those that are US \$62 million or more). Most of the activity involving acquisition process takes place within the Ministry of National Defense (219).

Figure 15 (Ministry of National Defense) depicts the organizational structure of the MND, including its external agencies, the JCS, and the services. Shaded boxes represent offices or agencies that are directly involved with the ROK acquisition process. It is important to note that it is these agencies within the MND and JCS that the JUSMAG-K deals with on a day-to-day basis in support of the US security assistance mission in the ROK (219).

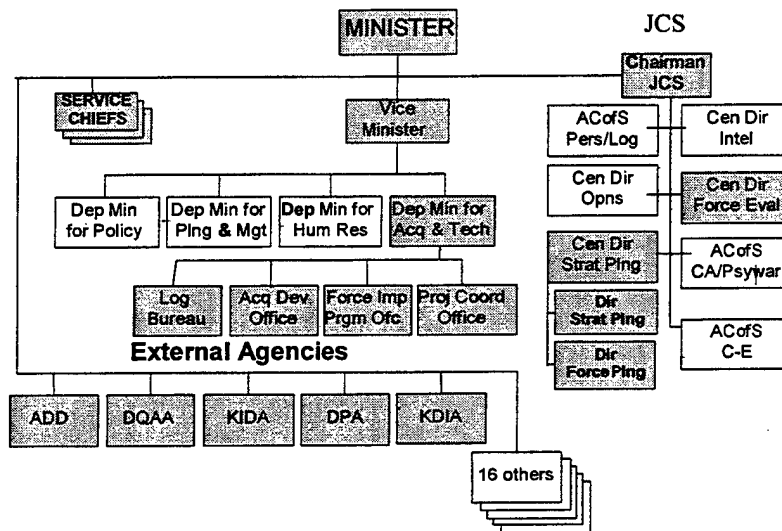


Figure 15. Ministry of National Defense (219)

Within the MND, the Deputy Minister for Acquisition and Technology is responsible for weapon systems acquisitions. The ADO reports directly to the Deputy Minister for Acquisition and Technology. There are twenty-one total external agencies in the MND. Five of these agencies have roles in the acquisition process (219).

1. Agency for Defense Development (ADD)—Conducts and oversees research and development as well as supervises indigenous industrial research and development of weapon systems (219).
2. Defense Quality Assurance Agency (DQAA)—Conducts test and evaluation on technologies developed by industry and offers certain technical assistance to the ROK armed forces (99:182).
3. Korea Institute for Defense Analyses (KIDA)—Conducts cost effectiveness and architecture and availability studies throughout the various phases of the acquisition process (219).
4. DPA—Carries out the negotiation function under guidance from the Director General, ADO, within the MND (219).
5. Korea Defense Industry Association (KDIA)—Focal point responsible for representing and managing information for the ROK's defense industry (219).

In addition to the external agencies, the JCS is a major player involved in the ROK's acquisition process. Within the JCS, the Central Directorate for Strategic Planning is responsible for tracking weapon system requirements. Existing within this central directorate are the primary action offices—the Directorate for Strategic Planning and the Directorate for Force Planning. In addition, a newly created Central Directorate for Force Evaluation has been given the mission of direct oversight of all T&E in the acquisition process. These offices, together with the external agencies previously discussed, are the functional management entities involved with the ROK's acquisition process (219).

Besides the functional management offices within the MND and JCS, there are four major decision-making "councils" that supervise the weapon systems acquisition process. Within the JCS, the Joint Strategy Council (JSC), is responsible for deciding weapon systems requirements. The other three councils fall within the MND—the WLARC, the ARC, and the EARC. These three councils determine both the method of acquisition and the item selection. In addition to these councils, the JCS and MND have other directorate level working councils responsible for providing timely and accurate information and analysis as required throughout the entire acquisition process (219).

Another important element involved in decision-making is the DIC. Acting similar to the US Defense Resources Board, the DIC is involved in the ROK planning, programming, and budgeting system process. As previously mentioned, the DIC is an interministerial committee charged with finding the "ways and means" of implementing the DIP. In accordance with MND Directive 557, the DIC is not a formal decision-making committee in the acquisition process. It is charged with identifying resources and eliminating problems associated with the overall DIP. However, in the past, the DIC has made recommendations for reevaluation of acquisition decisions made by the MND and JCS. The power to trigger reevaluations of acquisition decisions can result in delays as well as cancellations of proposed requirements. Thus, although not a formal decision-maker, the DIC has considerable influence on the process. With regard to the make-up and interrelationships among the various decision-making activities, it is important to note that some memberships cut across councils/committee boundaries. Noteworthy is the fact that the makeup of the DIC is virtually the same as the EARC, with the exception

of representatives from outside the MND, such as the Minister of Finance and Economy, and the Minister of Science and Technology (218; 219).

Elements of the ROK Acquisition Process

As previously mentioned in the ROK Acquisition Process Overview, the ROK acquisition process is composed of five elements: (1) requirements determination phase; (2) testing and evaluation phase; (3) negotiation of method of procurement ; (4) selection of weapon system; and (5) budgeting (219). This section explores each element in detail.

Requirements Determination Phase. Weapons and defense-related system requirements determinations are made by each service component or RSC. The service component will take into account the function of the weapon system within the theater, performance notification requirements, and ROCs. Requirements are submitted as part of the Medium and Long Range Force Requirement Plan (MLRFRP) to the ROK JCS, Central Directorate for Strategic Planning. The JCS, Directorate for Force Planning reviews and validates the submitted requirements and creates both the broad-based Joint Military Strategic Plan (JMSP) used to begin the budgeting process, and the Joint Medium and Long Range Weapon Systems Requirements Plan (JMLRWSRP). The purpose of the JMLRWSRP is to fully define the ROK weapon systems requirements needed to support the JMSP (218).

The JMLRWSRP is divided into two components: (1) the Letter of New Requirements Proposal, and (2) the Letter of Medium and Long Range Requirements. The JMLRWSRP is reviewed first by the JCS Working Level Coordination Council (WLCC) and is subsequently approved by the JCS through the JSC. Once approved, this

document is sent to MND to begin the acquisition process. Figure 16 illustrates this phase of the ROK acquisition process (218).

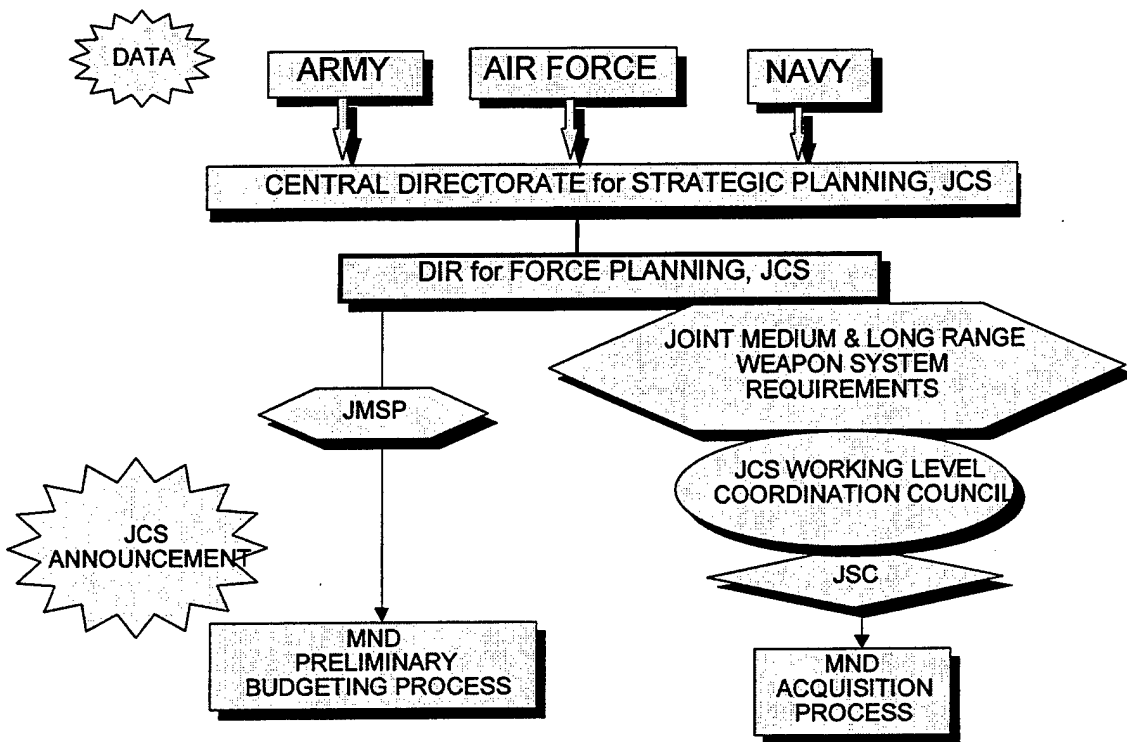


Figure 16. Requirements Determination Phase (219)

T&E Phase. The T&E phase is made up of (1) pre-T&E, and (2) T&E. In pre-T&E, data is gathered and necessary information provided to RSCs and other T&E agencies to determine which systems will be selected as candidates for acquisition. T&E is normally conducted by the RSC and T&E agencies respectively, with the JCS providing necessary guidance. In accordance with MND Directive 568 (16 August 1997), the JCS, Central Directorate for Force Evaluation provides oversight for T&E activities. Several actions occur before the actual T&E phase is initiated.

To begin with, the JCS will publicly announce the proposed planned acquisition via the Internet (Figure 17), *ROK Defense Daily*, and/or other means (218; 219).

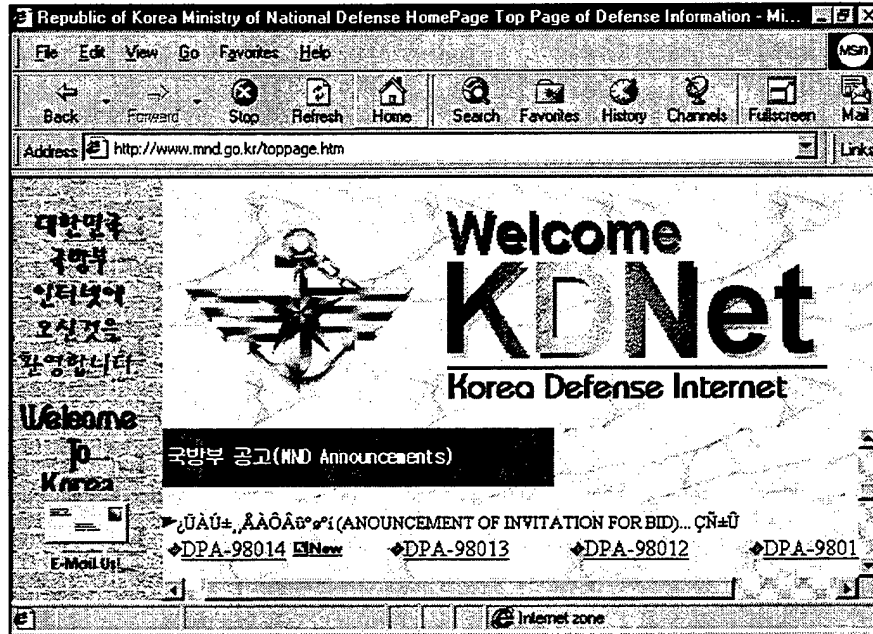


Figure 17. Ministry of National Defense Homepage (220)

After the announcement is made publicly, competitors are free to submit a written pledge along with a copy of a registration certificate to the appropriate activity as specified in the announcement. The JCS will then issue a request for pre-proposal with a deadline for review set up to occur within 30 days after issuance of the pre-proposal. Once the deadline occurs, the JCS will review the data on all candidate systems. At this stage, review criteria can include items such as the following: (1) availability within prescribed timeframes/satisfaction of required operational capabilities, and (2) manufacturer credibility/items in service. After their review of candidate weapon systems, a request for proposal-1 (RFP-1) is issued. Competitors have 90 days to reply to the request. A manufacturer will be eliminated as a candidate if it is late or decides not to

comply with time requirements. In this instance, it will no longer be eligible to participate in the currently advertised acquisition. Figure 18 illustrates pre-T&E activities.

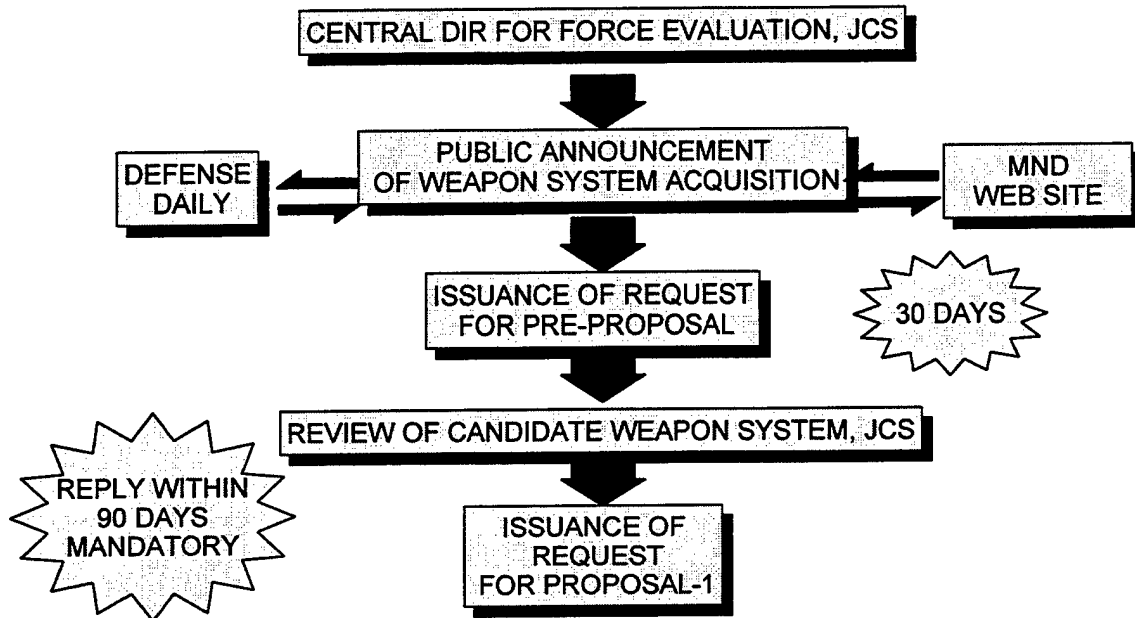


Figure 18. Pre-Test and Evaluation (219)

The actual T&E portion of the Test and Evaluation Phase is what provides decision-makers with the critical information necessary to determine which system to negotiate for acquisition. T&E is conducted primarily through review of submitted printed data. The parent company is responsible for the credibility of all submitted materials, and is not permitted to include in the proposal any capability comparison or criticism of competitors' equipment (218).

Before the JCS begins T&E, actions take place both subsequent to the requirements determination phase and in support of the negotiation phase. After the JMLRWSRP is approved by the JCS through the JSC, it is sent to the MND, ADO.

Based on the requirements stipulated in the JMLRWSRP, the ADO will coordinate with functional offices within the MND in an attempt to evaluate proper methods of procurement. The ADO coordinates with the MND, DPA, the RSC, and the MND, ADD to evaluate the potential for indigenous development, technology transfer, or foreign procurement. Based on the outcome of this effort, the ADO, in concert with the MND, WLARC will forward a recommendation in the form of the Defense Acquisition and Development Plan (DADP) to the ARC and the EARC. Results from the councils yield a template for the Defense Medium Range Plan (DMRP). The DMRP contains both the JMLRWSRP and the DADP. It is the responsibility of the Defense Minister to authorize the DMRP. Once authorized, it is sent to the Deputy Minister for Planning and Management to begin the preliminary budget forecast. With the Defense Minister's approval, the DMRP is sent to the JCS signaling authorization to begin T&E. Once T&E results are obtained, the DMRP is sent back to the ADO where it is used as the blueprint for the acquisition and as a template for funding (218). Figure 19 offers a simplified view of the T&E process.

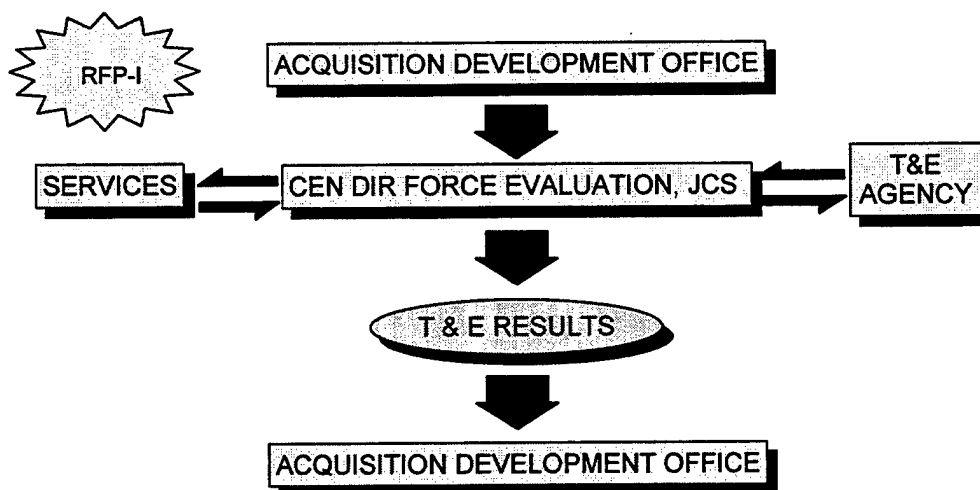


Figure 19. Test and Evaluation (219)

Negotiation Phase. This phase in the process determines the method of acquisition (218). There are three acquisition methods; ROK regulations mandate the consideration of these methods in the following order:

- (1) Research and Development—Consists of indigenous development and co-development options, including reverse engineering development.
- (2) Technology-Introduced Production—Consists of assembly production, co-production, and licensed production.
- (3) Direct Procurement—This is a commercial purchase from a foreign country by the ROK government. Examples would be direct commercial sales or foreign military sales by the US.

The ADO controls the negotiation of the method of procurement for weapons systems from foreign countries. This includes technology-introduced production and direct procurement. In accordance with negotiation guidelines, the RSC will provide the DPA with the data required to conduct detailed negotiations. The DPA makes final determination for an RFP-2 and initiates negotiation with eligible foreign manufacturers. As part of the negotiations process, the DPA and RSC are responsible for gathering cost comparison data on candidate systems. To ensure requirements are justified, the RSC and MND, KIDA will conduct separate analyses of cost versus effectiveness for the proposed systems. After synthesizing the data into a consolidated report, the DPA will forward the report to the ADO. The ADO will provide the report to WLARC for review before submitting the report to the EARC for weapon system selection and purchase authorization (218). Figure 20 depicts events leading up to the triggering of T&E, and the subsequent integration of negotiation and budgeting phases.

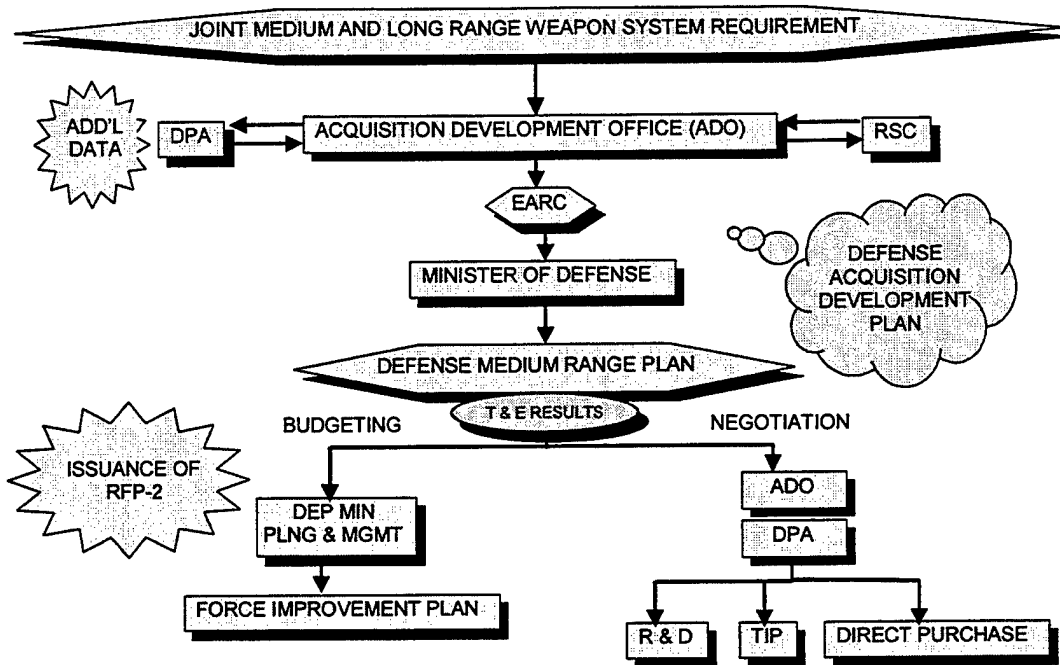


Figure 20. Negotiation Phase, Budgeting, and Events Leading up to T&E (219)

Weapons System Selection and Award. Before a weapon system is selected, the DIC conducts a review to determine the availability of funds and ensure conformity with national policy. After receiving results set forth by the DIC, the ADO will conduct a comparative evaluation of each candidate system based on T&E results submitted by the JCS, and results of the negotiation for procurement submitted by DPA. The ADO will proceed with purchase authorization after receiving results of the final EARC meeting. If it is determined that the weapon system be procured from direct procurement (foreign manufacturer) subsequent to both the Defense Minister's and President's approval, along with National Assembly review and approval, the ADO will authorize DPA to proceed with the purchase. Figure 21 depicts the weapon system selection process of an overseas purchase. The DPA coordinates with the RSC for contract information. The DPA is

charged with gathering data on cost comparisons, including offsets and price quotas. This information is consolidated, packaged, and sent to the ADO. The ADO sends their recommendation to the WLARC for preliminary review, who in turn, forwards its findings to the ARC and EARC. The EARC produces results which trigger the ADO to proceed with purchase authorization. From here, the package must go through the DIC to ensure no funding problems exist (218; 219).

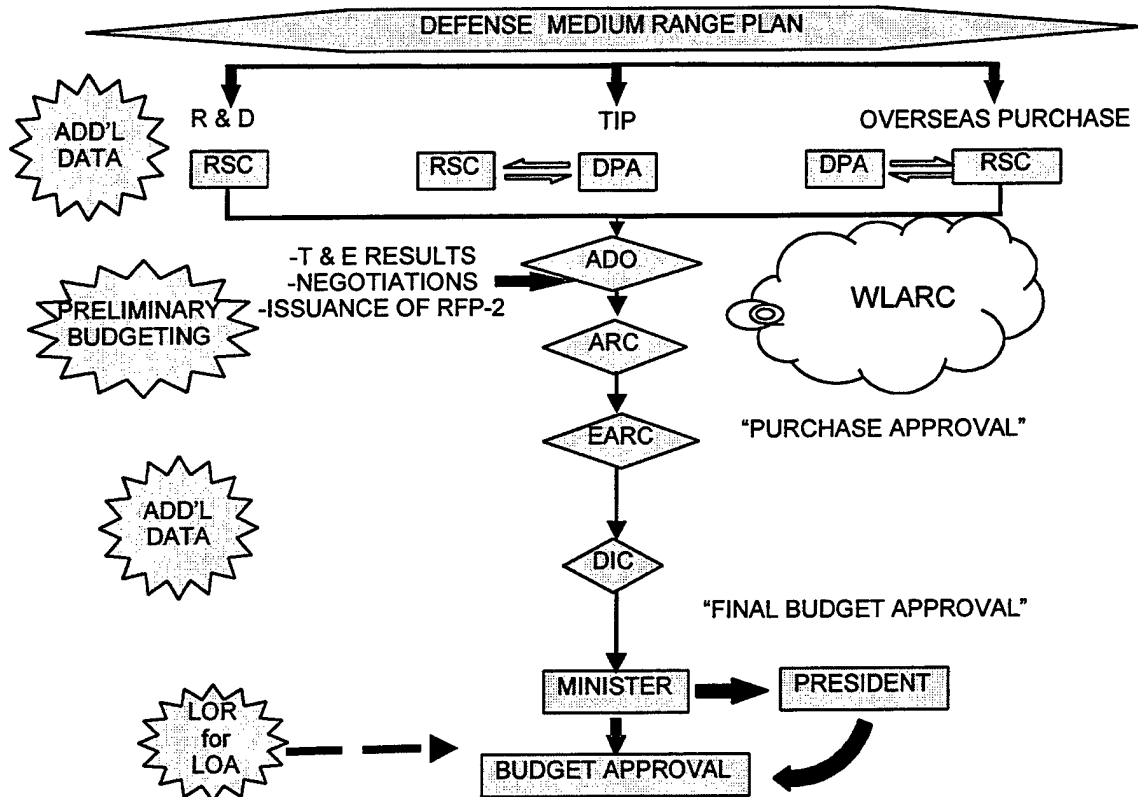


Figure 21. Weapon System Selection (219)

Budgeting. As previously pointed out, if results from the DIC are favorable, the proposal is signed by the Defense Minister, the National Assembly grants funding authorization, and the weapon system is budgeted for and placed in the DIP (218; 219).

Acquisition Time Line. Figure 22 shows the ROK weapon systems acquisition process as it applies to a time line. Two points regarding the ROK's acquisition process are (1) the ROK Fiscal Year is the calendar year, and (2) money is actually obligated in the year of project execution (218).

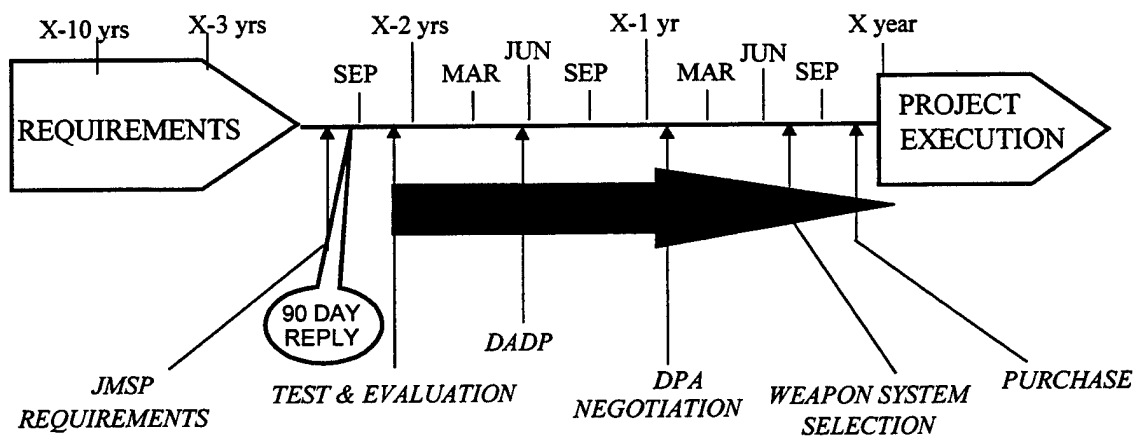


Figure 22. Acquisition Process Time Line (219)

As depicted in the time line, requirements must be approved in the JMSP not later than June of the third year before the year of project execution. The DADP must be completed 18 months prior to execution. In a situation where there are no significant impediments and funding is not problematic, acquisition takes at least two and one-half years.

Acquisition Example

Figure 23 illustrates the notional acquisition of an army attack helicopter. In the example, the ROK Army determines a need for an attack helicopter and submits the requirement in mid 1998. The process would see the ROK Army working this requirement through the WLCC and the JSC, and ultimately, it would be added to the JMLRWSRP by December 1998 (25 months out from execution). Next, by June 1999 (18 months prior to project execution), the T&E candidate systems will be chosen through formal negotiations with all eligible competitors and the system is formally added to the DAPD. During the year prior to execution, the actual weapon system will be selected. Once fully approved, the acquisition is packaged with other approved DIP items and included in the 2001 budget, which is compiled by the National Assembly during the last fiscal quarter of the year 2000 (218).

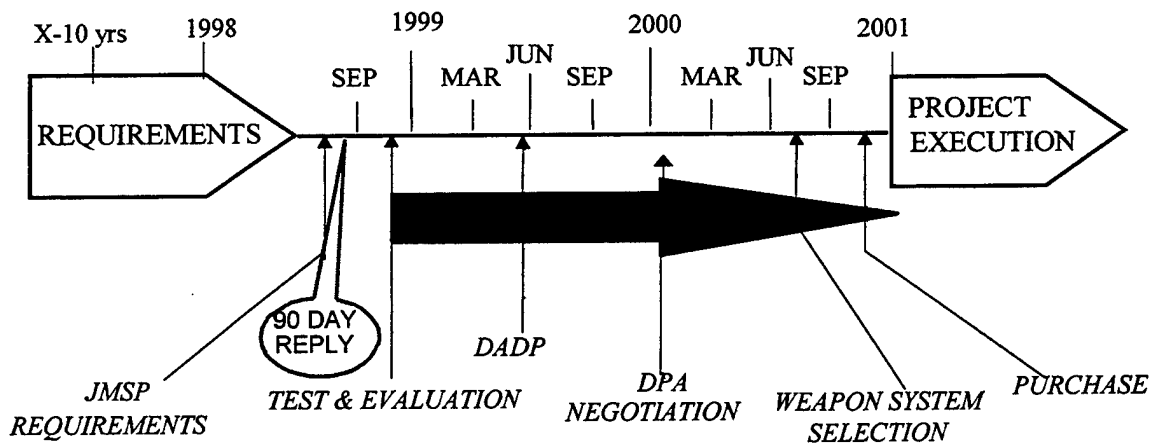


Figure 23. Acquisition Process Time Line Example (219)

Issues and Challenges

The current economic crisis in South Korea has clouded the outlook of the ROK's defense acquisition programs. From a defense-spending standpoint, the crisis complicates what was already an environment characterized by acquisition process reform. The key players will most likely be more cautious than ever about making acquisition-related decisions. The costs associated with offshore weapons proposals could become as, if not more important a consideration as the potential for obtaining sophisticated technology. In addition, there is speculation that as acquisition becomes more visible and more subject to public scrutiny, the process may take on greater degrees of politicization (218). It is likely that the Cabinet and National Assembly may increasingly influence the outcomes of acquisition decisions. In the end, however, the continuing threat from North Korea may serve to counterbalance over-politicization and uncertainties brought on by the economic crisis.

Summary

The purpose of this chapter was to furnish information on the ROK's weapon systems acquisition process as a point of reference for interpreting and enhancing the validity of the thesis effort. It portrayed a unique process that is oriented more towards purchasing from offshore suppliers than indigenous research, development, and production. The information outlined in this chapter represents an extensive effort at ROK acquisition reform which has resulted in a more open and publicly transparent process.

The SAM-X case may have been the first great test of the ROK's reformed acquisition process. In the short run, a departure from the traditional, behind-the-scenes approach to acquisition may come with a price. Greater openness and public scrutiny led acquisition decision makers to seriously consider the Russian S-300 system over the US-made Patriots. However, as high-level US and Russian involvement crept into the decision, process control seemed to slip away. Not only was the reformed process tested in its ability to autonomously select a supplier for an offshore procurement, but its ability to withstand the effects of outside influence was tested as well.

In addition to familiarizing the reader with the ROK's acquisition process, the chapter was intended to provide an understanding of background issues that have led to the current process, key players associated with its implementation, and issues and challenges shaping its status.

VI. Conclusions and Recommendations

Introduction

In this chapter, research questions initially provided in Chapter I will be answered in-depth to provide conclusions for the thesis effort. Actual research questions will be provided and answered in the order originally presented. After answering questions, recommendations will be provided.

Research Questions and Answers

1. How has the evolution of the South Korean political system helped shape weapons development and acquisition policy?

Once characterized as a series of repressive and dictatorial regimes run by rulers pre-occupied with maintaining power and control over the country, the South Korean political system has evolved into what appears to be a true democracy. Along with the progression of the South Korean political system towards greater stability and democratic freedoms, the ROK's system of weapons development and acquisition has undergone a major transformation.

Gone are the days when corruption-laden government programs could be carried on outside of public view. Greater political freedoms have led to greater levels of public scrutiny of the government and its programs. The refurbishing of the ROK's weapon systems acquisition process from one that was cloaked in secrecy to a more visible process has directly resulted from anti-corruption reforms carried out in the ROK during

the last five years. Another effect brought on by a democratic ROK government is the pragmatic political necessity to take public opinion, as well as the media, seriously with regard to public policy. During the 1997 visit by Secretary Cohen, it was public outrage at the idea that the US was bullying the ROK into buying a missile system that caused the government to "stand up" to the US diplomatically.

Despite the obvious credit given to democratization as having a profound impact, ROK weapons development and acquisition policy began evolving much earlier than did signs of a democratic government. The ROK went through 39 years of repressive rule (Rhee, 1948-60; Park, 1961-79; and Chun, 1980-87), during which significant strides in indigenous defense and acquisition policy occurred. The following regimes (Roh, 1988-93; Kim, 1993-98) would be progressively more democratic, and would affect weapons development and acquisition policy in different ways.

In terms of an indigenous defense industry, weapons development, or acquisition policy, the Rhee government can be given credit for little more than providing a starting point for subsequent regimes to evolve from. The Park government, although by no means a stable democracy, did lay the groundwork for a defense infrastructure. It is during the Park presidency in which the first signs of policies, laws, and diplomatic overtures were attempted by the ROK, many with great success. The Chun regime deviated relatively little from Park's policies, but did have success expanding ROK weapons exports. It is in the democratically elected presidency of Roh Tae Woo where the ties between the ROK and several former communist countries is strengthened, giving the ROK great diplomatic leverage over North Korea, and paving the way for ROK-Russian engagement in the defense sphere. The Kim presidency is given credit for

shining a spotlight on many government agencies, uprooting corruption, and successfully breaking up the traditional arrangement enjoyed by the military and defense contractors that grew up during previous administrations. His efforts led to massive personnel restructuring and ultimately to unprecedented acquisition reform.

Taking a closer look at the impact each ROK presidential regime had on weapons development and acquisition policy, the Rhee era can be characterized as having been almost entirely dependent on the US for military assistance in the form of weapons and supplies. The ROK military did manage to expand significantly until 1960, receiving considerable assistance from the US under various grant and transfer programs. In terms of weapons development or the advancement of a defense industry, however, the Rhee era produced very little.

It is during Park Chung Hee's reign as ROK president that the first signs of a defense industrial strategy emerge. Park's strong authoritarian style would allow him to push through many initiatives that would support this strategy. In addition, he had engineered his government in a way that made it almost impossible to resist his mandates once they were set into action. For this reason, the Park government was able to implement plans that would begin reaping successful results in the area of rapid economic growth, advancements in ROK foreign diplomacy, improvements in the military, and by the late 1960's, development of an indigenous defense industry. Park's strategies successfully tied defense industrial development to the country's economic plans.

Park began articulating a national strategy for industrialization based on exports in 1961, with the establishment of the ROK's Economic Planning Board. Then,

beginning in 1962, Park started the first in a series of five-year plans designed to guide the economy through industrialization, ultimately paving the way to international industrial export markets and self-sufficiency. In 1965, relations between the ROK and Japan normalized, resulting in huge guaranteed loans to the ROK by the Japanese. In the same year, the ROK began sending troops to Vietnam in support US operations against the North Vietnamese. The US paid heavily for the ROK's support, spending \$927 million to support South Korean forces in Vietnam from 1965-70. The ROK reaped an additional \$546 million from 1965-69 through military commodity procurement, war risk insurance premiums, contracts for services and construction, military and civilian personnel remittances, and commercial exports (1:37). Thus, by the late 1960s, the ROK was, with the help of loans and US aid, able to direct capital into strategic industrial sectors, such as machinery and steel. This provided the foundation from which the ROK could then move to absorb key technologies from the US and begin plans for production. By 1968, the ROK indicated that it was ready to open bidding in the world market for an ammunition and a rifle factory (32:225).

Signs of a deepening commitment towards developing a defense industry emerged in 1970, when Park established the Agency for Defense Development (ADD) to "assist the private sector's defense-related R&D, acquire foreign defense technology, and engage directly in defense product development" (81:247). As the arbiter of the ROK's early attempts at weapons development, the ADD "designed production processes with technical material provided by the US and disassembled and reverse-engineered weapons in their possession" (82:156). Under the direction of the ADD, the ROK successfully

fired an indigenously produced surface-to-surface missile in 1978, becoming only the seventh nation in the world to produce missiles (32:228).

In 1971, the ROK began the licensed production of the M-16 rifle, and by the mid-1970's, South Korea had entered into several licensed production agreements allowing the production of many other types of US-designed weapons, including grenades, mortars, mines, and recoilless rifles (4). As the ROK began to cultivate an arms production capability, it also began developing an arms export strategy. Park used his legislative authority to carve out the necessary support environment to help the defense industry with this strategy.

In 1973, Park enacted the Provisional Law for the Promotion of Military Supply as a way to help foster growth in the defense industry by granting long-term, low-interest loans, tax exemptions, and other incentives to firms producing defense-related items (32:227). Also in 1973, Park outlined his plans to implement the *Yulgok* Project, intended to "reduce foreign dependence through domestic production of conventional weapons" (82:157). Then in 1975, Park created a special defense tax to further finance defense industry related goals for the period (1:40). In another initiative in 1978, Park promulgated the Aero-Industry Promotion Law to pursue the establishment of an aircraft manufacturing capability. This would help lay the groundwork for a later 1979 agreement between the US company, Northrop, and the ROK government to co-produce F-5E and F-5F jet aircraft (32:228). All of these initiatives would be instrumental in creating an extremely close alliance between the *chaebol* (Korean conglomerates) and the ROK government.

Initiatives in self-sufficiency and an export capability would begin to pay off by the mid 1970s. In 1975, cash purchases by the ROK for weapons exceeded the value of US military aid, and by the end of the 1970s, the ROK was covering more than 90 percent of its total defense costs (74:32; 1:41-43). Until 1976, South Korea had directed most of its arms production towards satisfying domestic requirements, but by 1977, its arms exports volume totaled more than \$100 million, making the ROK a leading Third World arms-exporting country. The Chun regime would try to capitalize on exports to subsidize increased purchases of offshore weapons and defense technology.

Chun Doo Hwan rumbled into power in August 1980, uprooting the power elite that had existed during the Park era, and purging all real and imagined opposition. In Park Chung Hee fashion, Chun tried to engineer a government that would make his rule absolute. Due perhaps to the South Korean people's unwillingness to be the subjects of another dictator, Chun never adequately inherited the mandate of rule. His regime met strong public opposition. For this reason, Chun employed draconian measures to advance his rule. Chun's overzealous crackdowns, brutal suppression of students, and use of the military to crush a short-lived uprising in the city of Kwangju would foment enough public scorn to ensure Chun's step-down by 1987.

Chun did make two very important changes to weapons development and acquisition during his tenure as president. First, Chun's made the significant decision of shifting overall responsibility for decisions regarding defense acquisition and weapons development from the Blue House (ROK equivalent of the US White House), a vestige from the President Park era, to the Ministry of National Defense (MND) (82:158). This move may have been made due to Chun's inability to consolidate absolute power early

on, as Park had eventually done. It is possible that Chun preferred the comfort of projecting his authority and influence in the direction of the MND and the Joint Chiefs of Staff rather than serving as a focal point for decisions involving both industry and the MND.

Chun's next major initiative would involve a strategy to increase arms exports to the Third World to (1) help relieve problems the ROK was beginning to experience with excess capacity, and (2) subsidize increasing foreign military sales of new weaponry from the US. Because "Korean defense industry made tremendous progress during the 1970s in the domestic production of most conventional weapons" (82:157), "completion of supplying domestic needs in basic weapons" was reached, and the "Korean defense industry [was] facing the problem of excess capacity in many plants" (32:231). Chun doubted the economic efficiency of domestic weapons production. As a result, privileged treatment of the defense industry was de-emphasized and an attempt was made to cultivate the ability for the industry to survive on its own (82:157-158).

Another result from this was a reduction in research and development. "In April 1981, the ADD merged or abolished divisions with overlapping functions and dismissed about 800 researchers" (82:158). Some of these researchers had been "core members of guided-weapons teams and other high-tech systems research and development teams" (82:159). Chun's approach at improving the quality of the ROK military would be to "provide access to precision weaponry which required state-of-the-art technology" through "purchases of new weapons and defense production technology from overseas [mostly from the US]" (82:158). Chun would need a plan to finance this effort. Thus, in

an effort to help the [defense] industry and increase investment in [US weapons] technology, export of weapons to the Third World was emphasized (1:44).

It was apparent that Chun had less interest in developing the ROK's weapons production capability, favoring instead direct acquisition of advanced weaponry from the US. Chun's self-perceived level of influence over events which manifested itself in the form of brutal suppression, may have precluded an attempt to foster a synchronous relationship between industry, the military, and government. Another factor which probably influenced Chun's decision-making was the fact that, by the early 1980s, the ROK was emerging onto the world stage as a competitive force in culture and trade. The ROK was selected to host the 1988 Olympics. Hosting the Olympics would subject the ROK to international scrutiny, serving as a way for the world to see just how far the ROK had come. North Korea would certainly try and spoil things for the ROK. Chun's sense of urgency focused more on updating the ROK with modern weaponry, rather than coddling industry, an already unfamiliar area for Chun. Hwang supports this notion: "There was...concern that acquisition of [necessary] modern weapons could not be obtained from domestic sources in time to upgrade [South] Korea's security posture for the 1988 Seoul Olympics" (82:158). Ultimately, Chun's step-down in 1987 would signal the end of a 39-year era of political repression in the ROK, and mark the beginnings of democracy.

Although a formal army general and personal friend of Chun, Roh Tae Woo distanced himself from the legacy of Chun and was able to win the first direct ROK presidential election in 16 years with 37% vote (64). Roh enjoyed the honor of being the ROK president able to host the twenty-fourth Summer Olympics in the city of Seoul.

Success with the Games ushered a new era into the ROK of greater international openness, leading to Roh's policy of direct engagement with North Korean leaders, *Nordpolitik* (northern politics). Between 1988 and 1992, Roh led the way for the establishment of diplomatic relations with seven former communist nations, including Russia. In 1992, the ROK and China agreed to lay the foundation for diplomatic ties, as well. This would no doubt introduce an assortment of future possibilities for the ROK to explore, vis-a-vis, offshore weapons procurement and technology transfer. For this reason, Roh can be credited with constructing new paths for the ROK to pursue in its attempt to crawl out from under binding bilateral arrangements with the US. Politically, the ROK would continue to evolve democratically, and when Kim Young Sam was elected president in 1993, the emphasis on almost everything was weeding out corrupt vestiges from the past. Although Roh had been democratically elected, he could not escape Kim's campaign of purifying the government. His prior involvement with Chun would result in a 22-year prison sentence under President Kim.

Kim Young Sam, the first ROK ruler in 32 years who was not a former army general, was determined to weed out corruption at all levels of government. The defense program created by President Park back in 1973, *Yulgok*, was one of Kim's targets. Kim's wide-scale anti-corruption efforts would result in a review, and subsequently, a change in the ROK's weapon systems acquisition process. A by-product of the review yielded in acquisition reform, which was documented in ROK MND Directive 557, Weapon Systems Acquisition Management Regulation (19 May 1997). The directive governs all procedures concerning ROK weapon systems acquisition, with the intention of applying open procedures between related agencies and personnel so that MND could ensure

visibility into the process (218). In an effort to ensure weapons acquisition would integrate improvement of defense with government policies, the appearance of the Defense Improvement Committee (DIC) would emerge as a powerful player in the acquisition process. As an interministerial committee charged with finding "ways and means" of implementing aspects of the Defense Improvement Program, the DIC was granted the power to trigger reevaluations of acquisition decisions, resulting in delays as well as cancellations of proposed requirements (218).

When Kim's anti-corruption efforts extended into the *chaebol* structure, the inherent weakness found in what was too cozy a relationship between the government and industry was exposed. By 1997, the ROK's economic powerhouse status was usurped, replaced by an International Monetary Fund bail-out package agreement of over US \$50 billion. The Kim era was politically significant for its role in answering public demands for cleaner government, and as a result, weapons development and acquisition have become more transparent. Purchases from the US did remain steady during the period, however, ties with countries capable of providing a diversified source of supply for the ROK were strengthened from initial gains made during Roh's presidency.

To summarize, the ROK's political system has played a tremendously important role in helping to shape ROK weapons development and acquisition policy. Despite mandating severe societal restrictions on the ROK populace, several critical and successful defense-related policies were created during the Park period that would go on to lay the foundation for the development of the ROK's arms industry. Chun would rely on the policies and mechanisms created during the Park era focus on exports and acquisition of sophisticated US weapons technology. During the Roh era, the ROK was

able to establish diplomatic ties with several key former communist nations. This opened the ROK to expanded future opportunities in the arms trade. Reform measures ordered during the presidency of Kim Young Sam had a profound impact on the ROK defense industry and its traditional approach to acquisition. Under Kim, the programs for buying and developing arms were subjected to a more open and politicized process. Greater openness influenced political decision making, a phenomena played out in the SAM-X case.

2. How have US-ROK relations affected the development of the ROK defense industry and acquisition policy since the end of World War II, and the establishment of the Republic of Korea?

For the most part, the most crucial aspects of US-ROK relations have centered around security. Throughout the Cold War, the guaranteed security of South Korea was one of many bilateral commitments the US had entered in with the paramount goal of thwarting communist expansion. In many respects, the ROK has been confined to develop its weapons and acquisition policies within the space provided by agreements with and policies of the US. As the ROK's chief source of assistance and aid for many years, and then its primary supplier of purchased arms, the US has had tremendous influence on the development of the ROK's indigenous defense industry and weapons development programs. The ROK has made several attempts at developing "work-around" solutions to the problems of restrictive US-ROK bilateral agreements, strict US control of weapons and weapons technology exports to third countries, and the US reluctance to avoid transfers of technology. After the collapse of communism, President

Roh adroitly constructed diplomatic relations with many former communist nations. He also cultivated strong ties with China. Through these efforts, the ROK has diversified its potential source of arms supplies, creating a more demanding and competitive environment for the US to promote US arms sales in.

Ironically, at the start of the Cold War, South Korea did not qualify as part of the security framework as defined in the US policy of containment. When US Secretary of State Dean Acheson excluded Formosa and the ROK from the "defense perimeter" of the US, it was apparent that the US had made the strategic decision to sacrifice the ROK in the event of communist aggression. Up to that time, Acheson and ROK President Syngman Rhee had not "gotten along" well. Rhee had annoyed Acheson for failing to take adequate measures to curb inflation. Earlier, George Kennan, the "architect" of containment, had asserted that "alliances like the ones with Taiwan (Formosa, at the time) and the Republic of Korea were foolhardy and doomed to failure" (55). When North Korea launched a surprise attack against the ROK on 25 June 1950, the quickness with which the US decided to enter the conflict was also a surprise.

After the Korean War, the US and South Korea entered into a Mutual Defense Treaty on 8 August 1953. Terms of the treaty would be formalized in 1954 when US and South Korea signed the Mutual Security Act of 1954. The act would basically guarantee US support for the security of the ROK, authorizing the US president "to control, in furtherance of world peace and the security and foreign policy of the US, the export and import of arms, ammunition, and implements of war, including technical data" (77:184-185).

US-ROK relations during the Park presidency saw many ups and downs. The difficulty for Park lay in trying to conduct coherent, long-term diplomacy with the US, a country where domestic and foreign policy changes were frequent. During Park's presidency, five administrations passed through the US White House. To engage the US successfully, Park would have to adapt his country's policies to the foreign policy of the US. When US policy swung to the anticommunist end of spectrum, things were relatively easy for Park, and he was able to take advantage of the relationship. However, when the emphasis shifted to other areas, such as human rights under President Carter, the US-ROK relationship became strained. Strains in US-ROK relations usually disrupted Park's plans for a self-sufficient ROK in the area of arms production and development. In an attempt to ameliorate these strains and disruptions, Park attempted to work around normal diplomatic channels, sometimes with disastrous results.

The Kennedy administration provided stability for Park to fully consolidate political power and focus on improving all facets of the ROK's economy, including plans for a thriving indigenous defense industry. Through his "support any friend, oppose any foe to assure...liberty" speech, President Kennedy mollified concerns that the US might leave the ROK on its own to fend off North Korea. President Kennedy further demonstrated resolve against communism through his actions involving the Bay of Pigs, the Cuban Missile Crisis, and his support of South Vietnam. Park would skillfully involve the ROK in Vietnam in support of the US, winning huge concessions and guaranteed future support.

Assurances of US support disintegrated in 1969 when the Nixon Doctrine was announced. The unpopularity of the Vietnam War had prompted President Nixon to

declare that the US would still support third world allies of the US, but only through financial and military aid, not troops. Not long after, in January 1969, Park announced a plan during an inspection of the Ministry of National Defense to further develop the South Korean defense industry. He emphasized a need for "basic weaponry to arm the homeland reserve force, and a production system that centered on civilian firms' production of vehicles and gunpowder" (82:155). In July 1970, US Ambassador Brown notified the South Korean Prime Minister of a possibility of the withdrawal of one US division from South Korea and that further consultations would follow (72:61).

A year after delivering the Nixon Doctrine in Guam, President Nixon announced that the United States would reduce military forces in South Korea by 20,000 troops. As a result, Park proclaimed a state of national emergency in December 1971, and forced through the National Assembly a bill granting him complete power to "control, regulate, and mobilize the people, the economy, the press, and everything else in the public domain" (73). On 6 February 1971, an agreement was announced by the ROK and US governments whereby US troops would be withdrawn and a force modernization program would be implemented for the ROK's armed forces (72:63; 32:225). Thus, Park engineered the first Force Modernization (MOD) plan to be implemented during the period 1971-75. To assist the ROK with implementation of the MOD plan, the US pledged \$1.5 billion worth of assistance to begin in 1971 (1:39). During the MOD plan period, the ROK government began to allocate investments into defense-related research and development. The Agency for Defense Development (ADD) had already been created in 1970 to "engage directly in defense product development" (81:247). The ADD

oversaw "designed production processes with technical material provided by the US and disassembled, and disassembled and reverse-engineered weapons in their possession" (82:156). The US-ROK alliance appeared to have all the trappings of the relationship defined by the Nixon Doctrine. The US was beginning to withdraw its forces from South Korea, but was still committed to helping the ROK in the form of financial assistance and arms transfers. However, the impact of the US troop withdrawal, coupled with a historic visit by President Nixon to China in February 1972, convinced South Korean leaders that it would be unrealistic to count on an indefinite US presence in the ROK (74:24).

As guarantees of US assistance continued to diminish, Park conducted a stern and steady crackdown to further consolidate his power. He proclaimed martial law in 1972, and proclaimed a new *Yushin* constitution, which permitted Park to succeed himself indefinitely as president of South Korea. Park's ever-increasing crackdown led to mounting displeasure by the US with the ROK. Park sought ways to deal with US displeasure, and began holding high-level meetings in Seoul to explore ways to sustain US support. As a result, elaborate plans were created to attempt influence various levels of American society (75:27). The catastrophe that ensued was known as "Koreagate."

"Koreagate" erupted on 24 October 1976, when *The Washington Post* reported that a Korean agent, Pak Tong Sun, had distributed as much as \$1 million in a year in bribes to Washington officials and members of Congress, and that "US eavesdropping devices had recorded the bribery scheme" (60:92). By the end of President Carter's first year in office, four congressional investigations of South Korean activities were under way, with the resulting impact on US-ROK relations being extremely severe. According

to Robert Rich, State Department country director for Korea, "By the Spring of 1978, Congress probably could not have passed a bill stating that Korea was a peninsula in Northeast Asia" (60:92).

The Carter Administration would pull no punches regarding its displeasure with Park over its human rights infringements and its shady dealings in "Koreagate." Carter's emphasis on human rights was written into the US arms sales policy, announced on 19 May 1977. Among the basic guidelines set forth was a statement stipulating a requirement by the recipient country to "promote respect for human rights" (76:11).

In addition to pressure regarding human rights, President Carter announced on 9 March 1977, his intention to follow through with his campaign pledge to withdraw troops from South Korea. In the announcement during a press conference, he declared that the US would conduct a phased withdrawal of all 33,000 US ground troops stationed in the ROK (70:157-158). In response to President Carter's announcement, President Park stepped up efforts to develop the ROK's defense industry. At the first defense industry promotion conference held on 17 June 1977, Park personally directed his cabinet, military staff, and twenty-five representatives from the defense industry to achieve, by the end of 1980, the "establishment of a defense industry to a nearly comprehensive spectrum of weapons and self-supporting level, except in the areas of aircraft and certain types of highly sophisticated electronic arms" (32:228).

The ROK would manifest its push for self-sufficiency in its follow-up to the MOD program, the Force Improvement Plan (FIP) (1976-80). During the FIP, further linkage with the defense industry was ingrained, and massive investment poured into the heavy machinery, iron and steel, shipbuilding, metallurgy, and electronics industries

(81:249). In addition, through the activities of the ADD, the ROK would make inroads in the development of more sophisticated weapons, culminating in the test-firing of an indigenously produced surface-to-surface missile.

Although President Carter would eventually abandon the planned withdrawal of US troops, the 1970s would prove to be a difficult decade in US-ROK relations. Park was most likely caught off guard by the abrupt policy changes of the US beginning in 1969. Park's natural reaction to uncertainty in US-ROK relations was to further consolidate power and tighten political control. This strategy backfired on Park, bringing greater disfavor with the US, and by the mid-70s, Park was mired in increasing domestic problems and worsening relations with the United States. The situation would change dramatically in 1980, as newly elected presidents Ronald Reagan and Chun Doo Hwan would cultivate a much better relationship.

President Reagan's first official guest at the White House was President Chun, on 28 January 1981. President Reagan visited President Chun in 1983 in Seoul, reaffirming US support of the Chun regime (93). Although President Reagan's strong support of Chun fueled growing anti-US sentiment in the ROK, it created a very stable atmosphere with which Chun could abandon the urgent plans to develop a defense industry, and instead, work on enhancing ROK military capabilities through the outright purchase of US weapons.

The only problem the Reagan administration presented Chun was an impediment to the ROK's ability to establish a robust arms export industry, due to the third country sales restrictions set forth in the Arms Export Control Act. These restrictions had a detrimental effect on the ROK arms industry. In the 1981-82 timeframe, the ROK

requested a total of \$55.4 million for third country sales approval, of which only \$1.7 million [3 percent] was approved (81:260). The US did not appear to be nearly as restrictive with transfers of technology or allowances for licensed production of certain weapon systems. In 1982, the ROK conducted its first flight test of a Korean Air-Northrop co-produced F-5F (32:229-231; 84). By the mid-1980s, it was estimated that the ROK had achieved satisfying 70 percent of the nation's requirement for military equipment through 80 to 90 South Korean defense contractors (85:81).

The end of the Chun presidency, the last dictatorial ROK regime, marked the beginnings of a divergence in traditional US-ROK relations. Greater political freedom brought on by a progression towards democracy, along with the yearning to be in control of their national destiny, made the South Koreans very vocal in displaying their sensitivities of what they perceived to be an unfair relationship with the US.

After the democratic election of President Roh, and subsequent liberalization of the media, anti-US sentiment flourished. South Koreans aired their grievances with US to an international audience during the 1988 Summer Olympics. US pressure on the ROK to give in on trade issues caused tremendous resentment of the US. When the question of "burdensharing" came up and the ROK was requested to foot some of the bill for stationing US troops in South Korea, calls went out in the media which seriously questioned the need for maintaining US troops in the ROK.

Greater freedoms that came with the Roh presidency allowed the public's voice to be heard more clearly, and the South Korean people were candid about their dissatisfaction with the ROK-US relationship. The people were more interested in themes regarding national reunification with North Korea and expanding international

relations with other countries. Roh answered their calls by aggressively pursuing their demands.

The US took symbolic steps to ease the political transformation that was occurring in the ROK. US Forces Korea turned over command of combined ground forces to a Korean general in 1992. The US also de-emphasized the annual "Team Spirit" exercises that had been held without fail during the Cold War. Also, in 1990, in a win-win solution to appease both lawmakers in the ROK and US, US troops were reduced by 7,000 and US operations at three airbases were closed.

During the Roh presidency, the US-ROK relationship had matured, and the ROK was showing signs that it wanted to break free from the traditional bilateral arrangement that had suited both countries during the Cold War. From 1946 to 1976, the US had provided more than \$7 billion in military assistance to South Korea, and more than \$2 billion in FMS loans from 1971-86. By 1987, at the start of Roh's presidency, the US stopped FMS loans and began asking the ROK to begin considering sharing the financial burden of mutual defense (1:59).

Rather than looking to the US as a guarantor of security, the ROK began to look primarily at the US as a source of technology and advanced weaponry. The defense industry was adequately rooted by the time Kim Young Sam took over as president. "By 1993, there were 84 defense contractors in South Korea, working on 284 defense-related programs and employing approximately 45,000 workers" (84:238). The power and magnitude of the *chaebols* was present in the ROK's defense industrial sector. Companies like Hyundai, Daewoo, Lucky-Goldstar, and Samsung were making up approximately 75% of all ROK military procurement (84:238-240).

The initial procurement for the ROKAF 2000 plan, also known as the Korean Fighter Program was an example of an event highlighting the ROK's attempt at harnessing necessary technology and weaponry with the goal of eventually achieving an indigenous production capability. It also underscored the ROK's willingness to exercise greater levels of autonomy. The ROK, in no apparent urgent need for the F-16s could, in essence, "hold out" for the "sweetest deal" without worry of offending US contractors or government intermediaries. In what was a frustrating and murky ordeal, the ROK toyed with US aircraft companies over a proposed fighter beginning in the mid 1980s, until 1991, finally settling on General Dynamic's F-16. The *Bulletin of the Atomic Scientists* reported that it was "undisclosed offsets worth \$1.5 billion" that clinched the deal, and not the cheaper price of the F-16 (117).

During the Kim presidency, the ROK continued to exert greater levels of autonomy in decisions regarding weapons development and acquisition policy. In 1995, South Korea formally requested acceptance into the Missile Technology Control Regime (MTCR) to avoid restrictions written into older bilateral agreements between the US and ROK concerning indigenous development of surface-to-surface missiles. Essentially, the agreements limited the ROK to a range of 180 kilometers, and they had already indigenously produced a missile capable of traveling 260 kilometers. Entry into the MTCR would allow them to develop missiles that travel as far as 300 kilometers (117).

Despite the fact that the US granted South Korea permission to export the K-1 tank based on US technology, along with US assurances that South Korea would be responsible for building a light water reactor for North Korea, the issue of third country sales restrictions was a continued source of irritation for the ROK (104; 105). The ROK

also expressed displeasure with the US over the acquisition of technology. In the 1997-1998 Defense White Paper, the ROK complains, "Since the mid-1980s the defense industry has faced great difficulties mainly due to the evasion of technological transfer by the US" (110:185).

As a result of its perceived inability to gain access to US technology, the ROK made a greater attempt to attract potential suppliers from other countries. In addition, it made requisite the "seeking of offset deals that include increased technology transfer, particularly in aircraft design, to become self-sufficient in defense production" (136). *Defense Week* noted that European firms were trying much harder than US companies, paying higher fees and commissions to in-country marketing agents. In noting the intensity in competition that Russia's entry has caused, it added that "Koreans are very much aware of [the influx of new suppliers] and are attempting to take advantage of these conditions by acquiring advanced technologies to improve self-sufficiency in defense" (140).

Beginning with Roh, and continuing through the Kim presidency, a high level of ROK dissatisfaction over the traditional US-ROK arms relationship emerged. The ROK felt stifled in its attempts to develop some advanced indigenous weapons, and began outwardly resenting its inability to obtain desired US technology. To counter this, the ROK opened its potential supplier base to include countries such as England, France, and Russia. The ROK also adopted a direct offset policy in an attempt to involve South Korean contractors in some of the production work and also glean some level of advanced technology. By resorting to these measures, the ROK was enhancing its position of autonomy in the classic "supplier-recipient" sense.

3. How has the threat posed by North Korea impacted the direction of ROK defense weapons development and acquisition policy?

From the time the actual fighting of the Korean War stopped and on through Rhee's tenure as ROK president until 1960, both North Korea and South Korea were hunkered down in mutual recovery periods. Both countries had little choice but to rely on their respective sponsors for assistance in areas of economic and military rebuilding. The advantage North Korea had over the ROK existed in the fact that North Korea had two sponsors it could draw help from. When signs of a Sino-Soviet split in communist ideology emerged in the 1950s, North Korean leader, Kim Il Sung would learn to play off his communist sponsors against each other to the advantage of North Korea (60:10-11). When relations soured with one sponsor, North Korea would simply turn to the other sponsor. From 1953-56, the Soviet Union provided the bulk of assistance, and China maintained troops in North Korea. China pulled its troops out of North Korea by 1958, however, it increased its military assistance (61). From the standpoint of being able to extract concessions, South Korea did not enjoy the flexibility of having two sponsors to alternate between.

Through the early 1960s, in addition to developing its conventional military forces, North Korea put emphasis on subversion tactics and directing guerrilla actions against South Korea (77:280-281). What started out as a small-scale, peacetime infiltration strategy, would evolve into well-coordinated offensive raids by the late 1960s. The raids peaked in 1968, with more than 600 reported infiltrations committed by North Korea, including an unsuccessful attack on the Blue House in Seoul, and an infiltration of

more than 120 commandos off the east coast (62:304). In 181 of those incidents, "17 US and 145 South Korean military personnel were killed and 294 were injured" (78).

Commando raids conducted against South Korea most likely factored heavily into President Park's decision to acquire licensed production capabilities for light, conventional weapons to be used by the ROK Army. In 1971, Colt Firearm agreed to grant the rights to produce 600,000 M-16s, including parts and ammunition (1:39; 82:156). By the mid-1970s, South Korea began producing many types of US-designed under license, including grenades, mortars, mines, and recoilless rifles (4). Efforts at indigenous production were apparently aimed at creating self-sufficiency to the level necessary to head off the most immediate North Korean threat. The development of the *Hyonmu* surface-to-surface missile in 1978 rounded out the ROK's strategy to deal with the North Korean ground threat.

The seriousness of the North Korean threat ratcheted up several notches in 1984 when the DPRK successfully launched three Scud Mod B ballistic missiles. This gave North Korea a significant weapon of terror, as well as front- and rear-area attack capabilities. Amplifying the seriousness of the DPRK's ballistic missile capability was the attempt North Korea made at developing a nuclear capability. North Korea captured international attention when its secret nuclear program came to light in 1989. At first, North Korea agreed to accept International Atomic Energy Agency inspections of its nuclear facilities, but inspections were halted in 1993 when the North refused to allow key inspections of two areas suspected of holding nuclear waste. Exacerbating tensions, the North threatened to withdraw from the Nuclear Non-Proliferation Treaty. It wasn't until June 1994, after a state visit to Pyongyang by former US President Carter that

tensions were defused and renewed North-South talks were agreed to (64; 113). Months before Carter's visit, President Clinton had "ordered a battalion of Patriot missile interceptors [be] shipped to South Korea, calling on North Korea to 'do the right thing' by allowing international inspection of a laboratory capable of producing plutonium for nuclear arms" (191).

A self-reliant ROK counter-strategy to the mounting nuclear threat and ever-developing ballistic missile from North Korea did not take occur very quickly. At face value, it appeared that the international community was more concerned with the mounting threat from North Korea than the South was. It was not until 1997 that the ROK formally announced that it would take steps to create an early warning defense system, including a comprehensive surface-to-air missile capability. It is unclear what actually caused the ROK's indecisiveness. The dimensions of a nuclear threat from the North may have been too unimaginable for ROK leaders to deal effectively with. The most probable cause for the ROK's inaction lie in a "wait-and-see" posture which balanced existing US guarantees of security with long-range plans for indigenous development.

At this stage, although faced with a serious North Korean threat, the South was still stifled by restrictions in the development of indigenous missiles, and in terms of developmental programs, the ROK was concentrating its energies in the development of an aerospace industry. Allowing a hugely expensive endeavor such as the development of surface-to-air missile defenses, or direct procurement of them, for that matter, would compete directly with the already established Korean Fighter Program. More importantly, it had been implied long since the Cold War that South Korea fell under the

US nuclear umbrella. The South may have guessed that the awesome conventional and nuclear capabilities of the US might be enough to thwart a first strike from North Korea. Another more realistic reason to doubt a nuclear strike by the North lied in the close proximity shared by the two countries.

In any case, by 1994, the "wait-and-see" posture paid off, and it appeared that the US would provide needed air defenses for the security of Seoul. On 31 January 1994, *Defense News* reported that as President Clinton was considering the request by Army General Gary Luck, US Forces Korea Commander, "to deploy the latest versions of the PAC-2 Patriot," US officials were wanting South Korea "to take similar steps to accelerate procurement plans of the US-made system" (189). However, on 28 February 1994, *Defense News* reported that South Korean Defense Minister, Rhee Byoung-tae, announced that "South Korea has no plans to purchase Patriot antimissile batteries ...from the United States" (190). In the same article, it was reported that Rhee "denied charges from opposition lawmakers that a possible Patriot deployment (being consider by President Clinton) is part of a long-term scheme to sell them to South Korea" (191).

Finally, on 8 October 1997, in an apparent effort to instill public confidence, ROK Air Force (ROKAF) Chief of Staff, Lee Kwang-hak announced that the ROKAF would establish an early-warning alarm system to fend off a potential North Korean Scud missile attack by December of the same year. He also stated that he was aggressively promoting the introduction of short-distance radar bases and a next-generation surface-to-air missile defense system named the SAM-X project (148).

4. Why did the SAM-X project evolve into a priority ROK defense program?

On the surface, it would appear that the ROK, thrust into taking immediate action to defend itself against growing North Korean ballistic missile and nuclear threats, implemented the SAM-X project in an attempt to acquire a reliable, state-of-the-art air defense system. Upon closer examination, however, it is evident that the ROK had not taken immediate action in response to the North Korean threat. North Korea had begun flight-tests of indigenous Scud-Bs by 1984, and began exporting them by 1986 (96). In addition, North Korea's nuclear program came to light in May 1989, when a five-member US team of experts provided evidence based on US intelligence to the ROK government (60:256).

Despite these threats, the ROK staved off making a formal announcement of the SAM-X project until 8 October 1997, years after both North Korea's exhibition of a legitimate missile capability and suspicion of its nuclear capability. Considering this, it would appear that factors other than fear of the North Korean threat were at work, namely, the ROK's intention to steer clear of getting locked into a dependent relationship with the US in the sphere of advanced missile technology. The ROK's unwillingness to join the US-led TMD initiative makes this abundantly clear. In 1994, at the height of the nuclear standoff with North Korea, it appeared that the ROK had its most pressing need ever for an air defense system. In order to successfully deter the imminent threat posed by North Korea, a seemingly obvious course of action would be to follow suit with steps Japan and Taiwan had taken, and comply with the US-led TMD initiative for Asia. The ROK, however, did not desire pursuing the bilateral TMD initiative with the US, despite the probable nuclear ballistic threat from North Korea.

This is not to say that the ROK was not motivated to develop a defense against the threat posed by North Korea. The ROK's motivation appeared to be geared towards indigenous development of an air defense system to cope with the North Korean threat, rather than the purchase of an offshore system. The SAM-X, therefore, appears to have evolved for two probable reasons. On one hand, the ROK may have reached a point in its indigenous missile program where it needed greater levels of technology than it had access to, and thus could not successfully move forward. In this event, the ROK may have been willing to purchase an offshore system to extract a lucrative transfer of technology which would pave the way for future indigenous programs. This would have favored the Russian S-300, as Russia was willing to part with a tempting technology transfer package in its bid to sell the system. On the other hand, the ROK may have simply found itself at the point where it could no longer stave off public pressure calling for adequate defense measures. This occurred after increasing North Korean military incursions and an embarrassing air raid siren failure in 1997. The following paragraphs will examine the evolution of the SAM-X project in the context provided thus far.

The ROK has clearly demonstrated a desire to develop a comprehensive indigenous missile production capability. After ordering 67 French Crotale SAMs in 1989, South Korean companies worked under the technical assistance of Thomson-CSF until 27 October 1997, when it was announced the ROK had test-fired its first locally designed short-range SAM, the Chonma (166; 83:7; 167). Since the Crotale purchase in 1989, the ROK has turned to France twice for major purchases of Mistral shoulder-fired SAMs. The first order occurred in 1992, when it appeared the ROK would purchase

Stingers from the US, but delays involving congressional approval caused the ROK to turn to the France, and a purchase order for 984 French Mistral was submitted (170; 171). In the second major purchase, the US was out in front, going so far as to publicly announce in June 1997, a planned sale of 1,065 Stingers by the Pentagon that would be met "without objection from Congress" (172). The ROK still opted for French Mistral, announcing a purchase of 1,000 on 20 October 1997, a week before the planned launch of the French-inspired Chonma (154). This time, the ROK's decision to go with the French was indicative of the ROK's preference to diversify with a non-US supplier and the likelihood of satisfying levels of technology transfer assurances by the French.

The ROK's reasons for wanting to develop an indigenous missile production capability are not confined to defense-related matters. From a commercial standpoint, the ROK has been open in stating its future goal of developing a space program. The ROK views acceptance into the MTCR, and the consequent freedom to develop advanced ballistic technology as a vital step towards future development of commercial rockets for the purpose of launching satellites (156).

From a military standpoint, the ROK would also like to advance its production of the Hyonmu SSM. In 1994, South Korean Defense Minister, Rhee Byoung-tae disclosed that "his ministry is preparing a strategy to neutralize North Korean scud missiles using air power while the missiles are still on the ground" (190). He may have been referring to precision strikes from aircraft, however, North Korea could feasibly expend its scuds long before the South managed to gain any semblance of air superiority. SSMs, on the other hand, would have better success punching through North Korean air defenses during the early stages of conflict.

For the above reasons, the ROK had been attempting (at least since 1990) to work around a 1979 bilateral agreement it had entered into with the US that restricted development of indigenous missile production to those with a range of up to 180 kilometers. The ROK's approach was to first attempt entry into the MTCR, which would satisfy steps to take toward future commercial space goals and immediate SSM defense-related goals. Failing to gain entry, the ROK tried to gain US technology concessions to help develop its indigenous missile programs. The US has stood its ground, thwarting both ROK requests, and promoting full cooperation with the Asian TMD initiative.

The ROK announcement of the SAM-X came on the heels of a major blunder in executing the nation's air-raid warning system. On 23 May 1996, a North Korean pilot defected to the South in his Mig-19. As the fighter was tracked nearing the DMZ, air-raid sirens wailed in all the appropriate towns and cities, except Seoul, South Korea's capital. Evidently, the director of the warning center responsible for Seoul had ordered the system shut down a year before because of faulty operations. The mayor of Seoul publicly apologized for the incident, and prosecutors immediately sought the arrest of those thought responsible for the deed (221). Shortly thereafter, in September 1996, a North Korean submarine slid into South Korean territorial waters undetected, and accidentally ran aground. For 49 days, North Korean commandos ran amuck, prompting a massive manhunt. Seventeen South Koreans died in the ordeal, while ROK military and police managed to kill 13 commandos and capture one (131). A few months later, the most significant North Korean defector to have ever gone to the ROK, Hwang Jang Yop, would tell of a vast network of North Korean spies in the South as well as the fact that North Korea had nuclear and chemical weapons capable of "scorching" the South

(145). For these reasons, considerable pressure began to mount on the ROK government regarding the country's defense system.

It appears that the ROK wavered for as long as it possibly could before committing to a major offshore air defense system purchase. While doing so, the ROK worked hard to negotiate deals with the US to free itself from constraints regarding the development of indigenous missile technology. Adding to the realm of the ROK's possibilities and furthering its indecisiveness, was "a tempting technology transfer and debt-reduction package from Moscow" involving the sale of the Russian-built S-300 air defense system (204). By 1997, alarming security issues would force the ROK into some decisive action. After a series security breaches, the ROKAF Chief of Staff moved to quell fears that the MND was doing nothing about its air defenses. As part of the SAM-X, the ROK would have to purchase an adequate SAM defense system from an offshore supplier, as it had neither the time nor the required level of technology to implement its own program.

5. How has the SAM-X project reflected changes from the traditional conduct of ROK-US relations, vis-a-vis weapons sales?

The SAM-X case represents a development towards a new era defining the weapons acquisition relationship between the US and the ROK. Unlike the supplier-recipient relationships of the past, where US and Soviet supplier control mechanisms were firmly in place, and recipient countries acted in strict accordance within allowable parameters, the SAM-X represents a something which more closely parallels a customer-supplier relationship.

The dissolution of the Soviet Union and subsequent end of the Cold War has drastically changed the structure of international weapons trade. The most glaring aspect of the SAM-X case is that it involves dealings between parties that, only a decade ago, would have been unimaginable. The notion of the ROK snubbing the US and turning to Russia for a major arms deal would have been, indeed, unthinkable. However, the end of the Cold War has allowed countries to openly engage Russia. During the Cold War, economic dealings with the Soviets, especially the purchase of weapons, would have signaled an ideological shift, and an almost certain swift and harsh response from the US. Russia, unlike before, is now not only a viable source of weapons for the ROK to consider when making an offshore purchase, but also a debtor country to the ROK that has pushed the idea of repaying its debt in the form of weapons and weapons technology transfer. Thus, unlike the loyalties that were built up during the Cold War, the post-Cold War has brought with it the opportunity for the ROK to think beyond the US-ROK relationship, and begin planning for its future in Northeast Asia. Issues such as reunification with North Korea, trade relations with the People's Republic of China (PRC), and military exchanges and cooperation with Japan, Russia, and the PRC have taken on great significance in the ROK.

Another aspect to consider which has been brought on by the end of the Cold War is the relevance of the US-ROK bilateral military framework. The bilateral mechanisms developed during the Cold War on the Korean Peninsula are still in place, but the respective goals pursued by the US and ROK no longer fit the Cold War scheme. The US now openly promotes the sale of weapons as a way to advance economic and business interests. It is possible the ROK viewed the TMD initiative as a crass attempt

by the US to sell its missile systems and promote the technological basis for its own national missile defense system, scheduled for deployment by 2003. With Korean reunification predicted by many to happen within a few years, and its own interest in the region at stake, the ROK may have national plans that no longer fit into the bilateral framework that evolved during the Cold War.

The SAM-X offers a glimpse at what appears to be the ROK's greatest attempts yet at distancing itself from reliance on the US, and promoting development of not only its indigenous capabilities, but its autonomy in dealing freely with other international suppliers. The case shows that a conflict clearly exists between US plans for a bilateral TMD initiative in South Korea, and the ROK's national pursuit of indigenous missile development. The US had conducted "negotiations" with the ROK regarding the purchase of Patriots since 1994, with the ROK expressing little interest in purchasing the system. Despite growing ballistics nuclear threats and increasingly serious military incursions by North Korea, the SAM-X was not formally announced by the ROK until 8 October 1997. Ironically, this was two months after the offshore SAM defense system (Patriots versus S-300) procurement decision was put on hold until 1999. It was also two weeks before the purchasing decision switch from US Stingers to French-made Mistrals. A week after the Mistral announcement, the ROK released news to the national and international press that it had indigenously produced (with the assistance of France) its own shoulder-fired SAM, the Chonma. It is very possible that the ROK has bought time and intends to complete the SAM-X as an indigenous effort. In this event, the Patriots would not be a contender in a ROK purchasing decision, although the Russian S-300s could feasibly still be considered in a debt payback/technology transfer deal. Another

option would involve the ROK seeking continued technical assistance from France to avoid the US-Russian entanglement. Regardless of the option pursued by the ROK, it is evident that ROK will chart its own course, independent of US plans or initiatives.

Through its consideration of Russia as an arms supplier for a major defense program that the US has promoted heavily as part of a larger TMD program, signals the ROK's willingness to emphasize its national interests over its relations with the US.

The ROK's unwillingness to go along with TMD initiatives with the US throws a considerable wrench in the US plan, a plan which has been supported commercially and endorsed politically in the US. The case of the SAM-X shows that ROK leaders have responded to ROK public opinion, risked offending the US, and put their desire for defense industrial technology ahead of US-ROK relations, despite the imminent threat from North Korea. Although the ROK had made a similar move when it chose French-made mistrals over US Stingers, the move to Russian S-300s had much greater symbolic impact.

6. What is the current arms acquisition process utilized by the ROK?

In the *Pacific Rim Diversification and Defense Market Assessment Guide*, published in 1994, the following description pertained to the ROK defense procurement process:

The defense procurement process in Korea is neither simple nor straightforward. It is arduous, involves a panoply of different actors at different steps in the process, is susceptible to misinformation, rumor and innuendo, and is heavily dominated by the personal relationships that exist between government officials and the agents of foreign competing companies. There are approximately one hundred different individuals who directly influence the requirements, evaluation, and decision-making process. As a proposed contract flows through the

procurement system, the contractor, normally through an agent or consultant, must know where the proposal is, identify who is currently involved in the evaluation, and bring influence to bear when necessary. (5)

The description of ROK defense acquisition provided above represents a snapshot of the process as it had evolved since the *Yulgok* program was initiated under President in 1973. However, when Kim Young Sam (the first ROK ruler in 32 years who was not a former army general) was elected president on 18 December 1992, a campaign of intense reform was unleashed on Korean government and industry. Vowing publicly to fight corruption in the public and private spheres, President Kim's anti-corruption efforts extended to the military (101).

One of Kim's targets was the *Yulgok* defense procurement program. Kim ordered an investigation of the program in April 1993. Until that time, the program had not been subject to an audit. "The men in charge of the enormous defence budget [one-third of government spending during the 1970s and 1980s] did not have to give details of what they were buying either to the National Assembly or to the public" (120:36). As a result of the investigation, "39 generals were sacked, reprimanded, or jailed" (120:36).

Kim charged ROK Defense Minister Kim Dong Jin, to isolate and eradicate defense-related irregularities. As part of his efforts, the Ministry of National Defense (MND) established a committee (the Defense Acquisition Procedures Improvement Study Committee, commissioned in November 1996) to pursue acquisition reform. As a result of the committee's findings, ROK MND Directive 557, Weapon Systems Acquisition Management Regulation (19 May 1997) was created. This regulation governs procedures concerning ROK weapon systems acquisition process. Its intention is

to apply open procedures to related agencies and personnel so that MND can pursue a more transparent weapon systems acquisition process (218).

The current, reformed ROK acquisition process is composed of five major elements: (1) requirements determination phase; (2) test and evaluation (T&E) phase; (3) negotiation phase; (4) selection of weapon system and award; and (5) budgeting (219).

The requirements determination phase consists of requirements generation from service components to the ROK Joint Chiefs of Staff (JCS), Directorates for Strategic Planning and Force Planning. Service components take into account the function of the weapon system within the theater, performance notification requirements, and required operational capabilities (ROC). ROCs are translated into plans and reviewed by various JCS councils (the ROC is similar to the operational requirements document [ORD] used in the US acquisition process which identifies minimum acceptable requirements used to define system capabilities needed to satisfy mission needs) (218; 219).

After determination of a ROC, an announcement is issued from the JCS for solicitation of an acquisition program. Once the Central Directorate, Test and Evaluation in the JCS has evaluated data from eligible firms interested in the program, a request for proposal (RFP) is developed and sent to potential candidates.

The T&E phase consists of (1) Pre-T&E and ; and (2) T&E. In Pre-T&E, data is gathered and information is provided to the Required Service Components (RSC) and other T&E agencies to be used in determining which weapon systems will be selected as candidates for acquisition. In actual T&E, decision-makers are provided with critical information needed to determine which system to negotiate for acquisition. Based on

T&E results and guidance from MND, the Defense Procurement Agency (DPA) will negotiate with competitors (218).

In the negotiation phase, based on information provided by the DPA, a decision is made as to whether the system will be indigenously developed, purchased off-shore, or acquired through some combination of the two. The decision is made in the following order by the following councils: the Working Level Acquisition Review Council, the Acquisition Review Council, and then the Expanded Acquisition Review Council (218).

Once a comparative evaluation of each candidate system is conducted by the Acquisition Development Office (ADO) based on T&E results submitted by the JCS, the results of the negotiation for procurement submitted by the DPA. Based on this evaluation, a proposal is sent through various MND councils to the to the Defense Minister as final decision maker for approval. The Minister's approval is then turned into a decision to award and then a contract is concluded for the selected equipment (218; 219).

Noteworthy in the reformed process is the greater role budgeting has taken on. To meet funding authorization, the proposal must be scrutinized by the Defense Improvement Committee (DIC). The DIC is an interministerial committee charged with finding "ways and means" of implementing aspects of the Defense Improvement Program (DIP) in concert with government policies, vis-a-vis domestic defense industry and the development of indigenous technological capabilities. Results from the DIC are submitted to the ADO at the startup of weapons systems selection. In accordance with MND Directive 557, the DIC is not a formal decision-making committee in the acquisition process. It is charged with identifying resources and eliminating problems

associated with the overall DIP. However, in the past, the DIC has made recommendations for reevaluation of acquisition decisions made by the MND and JCS. The power to trigger reevaluations of acquisition decisions can result in delays as well as cancellations of proposed requirements. If results from the DIC are favorable, the proposal is signed by the Defense Minister, the National Assembly grants funding authorization, and the weapon system is budgeted for and placed in the DIP (218).

The ROK has worked hard to refine its acquisition process. The economic crisis that befell South Korea in late 1997 has clouded the outlook of the ROK's defense acquisition programs. The key players involved in defense procurement will most likely be more cautious about making acquisition-related decisions until the economy re-stabilizes. There is speculation that as the acquisition becomes more visible and more subject to public scrutiny, the process may take on greater degrees of politicization (218). It is possible that the Cabinet and National Assembly may increasingly influence the outcomes of acquisition decisions. The Kim presidency set a precedence for conducting defense acquisition that will, in all probability, move away from the process that had been characterized as once "involving a panoply of different actors, susceptible to misinformation, rumor and innuendo, and heavily dominated by the personal relationships that exist between government officials and the agents of foreign competing companies" (5).

7. Has a "new" paradigm emerged which describes the relationship between the US and ROK with regard to exchange of weapons for the post-Cold War era?

As the following analysis indicates, a very different US-ROK relationship has emerged since the end of the Cold War. The classic supplier-recipient relationship is no longer a viable framework from which to view the relationship. The relationship shared by the US and ROK vis-a-vis weapons procurement can be characterized as one that has taken on more of a customer-supplier orientation. The ROK now behaves much like the customer who shops in an unrestricted market, looking for the best product at the best price. The US, mostly due to the end of the Cold War, must now aggressively seek ways to promote sales and stay in business, much like the merchant.

To begin with, US goals have changed, as has the US approach to arms sales. The US no longer has as its goal the containment of Soviet-led communist expansion, and therefore no longer provides weapons as a vital tool to thwart the advancement of communism. Conversely, since the end of the Cold War, the US has increasingly emphasized arms sales as a tool to promote a healthy US economy. Thus, US arms sales to the ROK have taken on more of a pure commercial orientation, geared for profit, not as leverage against a great enemy.

In the meantime, indications suggest that the ROK has (1) achieved the status of a major arms exporter, (2) achieved an overall high level of indigenous production capability, (3) and greatly diversified its supplier base. To arrive at this analysis, the following factors and methods of assessment were utilized to examine weapons and acquisition development through each ROK political regime:

Table 9. Factor and Method of Assessment for Question 7.

FACTOR	PERCEIVED THREAT	DEGREE OF INDIGENOUS CAPABILITY	ALTERNATIVE SOURCES OF SUPPLY
Method of Assessment	The likelihood, imminence, and magnitude of the North Korean threat will be assessed through each ROK political regime	Where possible, degree of self-sufficiency will be derived from arms transfer data based on monetary units (US dollars)	Number of different suppliers and depth of respective supply will be assessed

Table 10. The Rhee Era

REGIME	PERCEIVED THREAT	DEGREE OF INDIGENOUS CAPABILITY	ALTERNATIVE SOURCES OF SUPPLY
Rhee (1948-1960)	High. Although North Korean military capability not developed yet, fear of conflict resumption was present.	None. No indigenous capability.	None. Only one supplier (US).

Table 11. The Park Era

REGIME	PERCEIVED THREAT	DEGREE OF INDIGENOUS CAPABILITY	ALTERNATIVE SOURCES OF SUPPLY
<p>Park (1961-1979)</p>	<p>High.</p> <p>North Korean military capabilities and provocations increase greatly.</p>	<p>None until early 1970s.</p> <p>Light conventional production capability emerges in early 1970s.</p> <p>By the mid-1970's, ROK signed several licensed production agreements and begins producing many US-designed weapons.</p> <p>By 1975, cash purchases by the ROK for weapons exceeded the value of US assistance</p> <p>By 1976, ROK is producing 44% of its weapons domestically.</p> <p>In 1977, South Korean arms exports volume totaled more than \$100 million, making the ROK a leading Third World arms-exporting country.</p> <p>Indigenous two-stage SSM produced in 1978.</p> <p>In 1979, US government approves an F-5E and F-5F jet aircraft co-production program between Northrop and the ROK.</p>	<p>Small amount from France and UK. Vast majority comes from US.</p>

Table 12. The Chun Era

REGIME	PERCEIVED THREAT	DEGREE OF INDIGENOUS CAPABILITY	ALTERNATIVE SOURCES OF SUPPLY
Chun (1980-1987)	<p>High.</p> <p>Advancements made in DPRK ballistic missile program.</p> <p>DPRK launches terrorist campaign.</p>	<p>Licensed co-production programs expands to include submarines, fighter aircraft, helicopters, and a minehunter.</p> <p>In 1982, ROK arms exports are close to \$1 billion.</p> <p>\$7.4 billion trade deficit in 1986 with the US prompts the end of US FMS loans and the beginning of ROK "burdensharing"</p> <p>By 1986, ROK is producing 70% of its weapons indigenously.</p>	<p>Sources diversify more. Small amounts provided by Italy, Germany, Indonesia, and Japan. US still provides vast majority.</p>

Table 13. The Roh Era

REGIME	PERCEIVED THREAT	DEGREE OF INDIGENOUS CAPABILITY	ALTERNATIVE SOURCES OF SUPPLY
Roh (1988-1993)	<p>High. DPRK in possession of significant missile threat; possible nuclear capability.</p>	<p>In 1991, South Korea announces order worth \$5.2 billion to purchase 120 F-16 fighter aircraft from General Dynamics. Included in the package (was an award to Samsung Aerospace Industries Corp. to produce 72 of the F-16s under license. Only 12 of the aircraft would be entirely US-made.</p>	<p>US no longer primary supplier. Between 1992-1994, world arms exports to South Korea were shared equally between the United States and Germany.</p> <p>Russia, France, and Netherlands become significant suppliers.</p>

Table 14. The Kim Era

REGIME	PERCEIVED THREAT	DEGREE OF INDIGENOUS CAPABILITY	ALTERNATIVE SOURCES OF SUPPLY
Kim (1993-1998)	<p>High.</p> <p>DPRK suspected of housing nuclear weapons.</p> <p>DPRK conducts provocative infiltration missions.</p> <p>High-level defectors confirm vast spy network; nuclear capability.</p>	<p>ROK produces and successfully fires an indigenously produced should-fired SAM. The "</p> <p>"Chonma" is based on the French-made Crotale.</p> <p>ROK makes repeated attempts to enter the MTCR to further develop its missile production capability.</p>	<p>Arms competition environment becomes extremely competitive in the ROK.</p> <p>England and Russia launch aggressive sales campaigns in Seoul.</p> <p>ROK turns to France in a large SAM purchase; England, France, and US had competed for the deal.</p>

As the analysis shows, South Korea's perceived threat has remained high, thus stimulating a continued need to acquire, upgrade, and maintain weaponry. While the ROK enjoyed neither an indigenous production capability nor diversified source of supply during the Rhee regime, the Park era marked significant progress in the area of production. Initiatives involving licensed production, establishing an export capability, and supplier diversification all begin before 1979. Exports reach their peak during the Chun presidency, and from 1987, shortly before the demise of the Soviet Union, a new relationship begins to emerge between the US and ROK.

Beginning in 1987 after inflicting record trade deficits on the US, the US begins to put more pressure on the ROK, prodding it to "step up" and assume greater financial

responsibility as a condition for continued partnership. Consequently, FMS loans were stopped, and the ROK began contributing to the maintenance of US Forces, Korea. Thus, by the end of the Chun era, the ROK had left the realm of economic dependency on the US for defense, the first step towards self-sufficiency. In addition, by 1987, the ROK was producing 70% of its own weapons. Dependency on suppliers for technology was still evident.

When the ROK began to greatly diversify its supplier base during the Roh era, dependency on the US for technology was no longer an implied aspect of the relationship. This was the ROK's second major step towards customer autonomy.

Finally, during the Kim presidency, the ROK had not only expanded its supplier base, but was entering into long-term relationships with other countries in major weapons deals. By this time, although still a very significant arms supplier to the ROK, the US was to a somewhat of a lesser status, having to now compete and bid on prospective ROK programs. As offset arrangements became requisite in ROK arms deals and obtainment of technology moved to the forefront of the ROK's weapons-buying decisions, movement away from the US on a series of major deals occurred. The most psychologically impacting of these was the ROK consideration of Russian S-300 air defense batteries.

Recommendations and Conclusion

This thesis identified and documented developments in the evolution of the defense industrial and weapons procurement policy of the Republic of Korea (ROK), and assessed the implications of these developments on US-ROK relations. Research found that for the ROK politically, much greater levels of societal freedom and democratization

have evolved through the past five ROK presidential eras. As a result, a higher degree of public scrutiny concerning defense industrial and weapons acquisition-related issues has emerged. This has led to higher levels of politicization favoring more autonomy and less reliance on the traditional US-ROK relationship.

While US-ROK relations have been generally good, the ROK has indicated growing levels of dissatisfaction with the supplier-recipient arms trade portion of the relationship. The ROK has sought "work-arounds" to what the ROK has perceived as unfair bilateral arrangements concerning indigenous testing and production. Frustration has also resulted over unsuccessful attempts by the ROK to export third country sales restricted weapons. In response to what it perceives to be stifling supplier control, the ROK has sought out new suppliers and has established offset policies in the hopes of securing weapons technology and other concessions. The ROK openly states its desire to indigenously produce the weapons necessary to meet the North Korean threat.

The North Korean threat poses an always imminent danger to the ROK. In addition to its vast conventional forces, North Korea has developed the possible deadly combination of nuclear weapons with a ballistic delivery capability. To effectively deal with this ballistic threat, the ROK initiated the SAM-X project in 1997.

Upon closer examination, the SAM-X appears not to be an urgent response to the North Korean threat, but a last resort taken when the favored options of indigenous production fell through. The North Korean ballistic threat had been around since the at least the late 1980s. The possible nuclear threat was known about by the early 1990s. However, it was not until 1997 that South Korea formally announced the program. It is possible that the ROK was working hard to develop its own SAM capability during the

interim. When a series of security breaches occurred in South Korea, the ROK government took more aggressive steps to quell mounting fears. The announcement of the SAM-X appears to have been one of those steps.

The SAM-X had a great deal of symbolic impact and importance for the US and ROK because it represented both the ROK's newly reformed acquisition process and a significantly changing US-ROK relationship vis-a-vis weapons sales. The ROK openly offered the SAM-X to offshore competition. The major competitors that emerged, Russia and the US, had been stalwart enemies just a few years before. The notion that the ROK could even entertain buying Russian weapons would have been ludicrous a decade before. Now, however, the ROK was sending a strong signal to the US that a domestic agenda openly supporting Russian weapons was eclipsing the traditional US-ROK weapons procurement arrangement.

The ROK's reformed acquisition process is still in its fledgling stages, and the SAM-X decision has been put on hold until at least 1999. In the meantime, the ROK continues to diversify its source of potential suppliers. Several significant developments occurred between the ROK and French governments since the late 1980s in the area of SAM development.

After examining ROK weapons development and acquisition through both historical and case study analyses, it appears that a very different US-ROK relationship has emerged since the end of the Cold War. Unlike the completely dependent reliance the ROK once had on the US for weapons, the ROK has become a major conventional arms exporter, achieved a high level of indigenous production capability beyond US-ROK bilaterally bound agreement, and greatly diversified its supplier base. For

sophisticated weapons of high technology, however, the ROK must still seek offshore suppliers. It appears clear that the classic supplier-recipient relationship has been replaced by one with a greater customer-supplier orientation. For sophisticated weapons, the ROK is now operating much like a customer who shops in an unrestricted market, looking for the best product at the best price.

Important considerations must be made to properly evaluate the changed US-ROK relationship. To begin with, as ROK opportunities have expanded and its desires for greater levels of autonomous indigenous production capabilities have been pronounced, competition for US defense contractors in overseas markets has increased and domestic opportunities have declined. Thus, US goals and the US approach to arms sales have changed. While the US no longer provides weapons as a vital tool to thwart the advancement of Soviet communism, it has increasingly emphasized arms sales as a tool to promote a healthy US economy. Accordingly, US arms sales to the ROK have taken on more of a pure commercial orientation, geared for profit, not as leverage against a great enemy. If the US desires to maintain a continued competitive edge in the ROK arms market, greater attempts at creative win-win arrangements are likely to be necessary.

With the Cold War over, traditional bilateral arrangements can no longer be used to fall back on. In addition, with the eventual absorption of North Korea becoming a likely reality, the ROK will be looking ahead, trying to define its future role in Northeast Asia. As such, it has less and less incentive to fall nicely into US defense plans and initiatives, but rather, to begin to define and refine its own. Much like a commercial

(non-defense) supplier must develop unorthodox approaches at maintaining competitiveness, the US defense industry may have to do the same.

Appendix A: Glossary of Terms

The following US weapons acquisition and foreign military sales terms are taken from The Management of Security Assistance, 17th ed. (Annex B) (128:713-746).

US Weapons Acquisition And Foreign Military Sales Terms

Arms Export Control Act (AECA) The basic US law providing the authority and general rules for the conduct of foreign military sales and commercial sales of defense articles, defense services, and training. The AECA came into existence with the passage of the foreign Military Sales Act of 1968.

Co-development A joint development project between the US and foreign government (s) to satisfy a common requirement.

Credit Transactions approved on a case-by-case basis by the Department of State, Treasury, and Defense, which allow repayment of military export sales for periods beyond 120 days after delivery of material or performance of service.

Co-production A program implemented by a government-to-government or commercial licensing arrangement which enables a foreign government or firm to acquire the "know-how" to manufacture or assemble, repair, maintain and operate, in whole or in part, a defense item.

Direct Offset A general type of industrial or commercial compensation practice required of a contractor by a purchasing government as a condition for the purchase of defense articles/services. The form of compensation, which generally offsets a specific percentage of the cost of the purchase, is directly associated with the items purchased, such as the production of components in the purchasing country for installation in the purchased end-item.

Foreign Military Sales That portion of US security assistance authorized by the Arms Export Control Act, as amended, and conducted on the basis of formal contracts or agreements between the US government and an authorized recipient government or international organization.

Grant A form of assistance involving a gift of funds, equipment, and/or services which is furnished by the US government to selected recipient nations on a free, non-repayable basis.

Indirect Offset A general type of industrial or commercial compensation practice required of a contractor by a purchasing government as a condition for the purchase of defense articles/services. The form of compensation, which generally offsets a specific

percentage of the cost of the purchase, is unrelated to the items purchased, and may include contractor purchases of commodities and manufactured goods produced in the purchasing country.

International Traffic in Arms Regulation A document prepared by the Office of Defense Trade Control, Bureau of the Politico-Military Affairs, Department of State, providing licensing and regulatory provisions for the import and export of defense articles, technical data, and services.

Interoperability The ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces, and to use the services so exchanged to enable them to operate effectively together.

Licensed Production Agreements made by US commercial firms with international organizations, foreign governments, or foreign commercial firms to produce weapons systems.

Maintainability The ability of an item to be retained in or restored to specified conditions when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources, at each prescribed level of maintenance and repair.

Military Assistance Program That portion of the US security assistance program authorized by the Foreign Assistance Act of 1961, as amended, which provides defense articles and services to recipients on a non-reimbursable (grant) basis.

Technical Data Package The technical design and manufacturing information sufficient to enable the construction or manufacture of a defense item component modification, or to enable the performance of certain maintenance or production processes.

Appendix B: Glossary of Acronyms

ABM	Anti-ballistic Missile
ACC	Acquisition Coordination Council
ADD	Agency for Defense Development
ADO	Acquisition Development Office
AWACS	Airborne Warning and Control System
AWLCC	Acquisition Working Level Coordination Council
BMDO	Ballistic Missile Defense Organization
DADP	Defense Acquisition and Development Plan
DIC	Defense Improvement Committee
DIP	Defense Improvement Program
DMRP	Defense Medium Range Plan
DOD	Department of Defense
DPA	Defense Procurement Agency
DQAA	Defense Quality Assurance Agency
DPRK	Democratic People's Republic of Korea
EACC	Expanded Acquisition Coordination Council
FIP	Force Improvement Plan
FMS	Foreign Military Sales
IFF	Identification Friend-or-Foe
INF	Intermediate-range Nuclear Forces
JCS	Joint Chiefs of Staff

JMLRWSRP	Joint Medium and long Range Weapon Systems Requirements Plan
JMSP	Joint Military Strategic Plan
JSA	Joint Security Area
JSC	Joint Strategy Council
JTAGS	Joint Tactical Ground Station
JUSMAG-K	Joint US Military Affairs Group-Korea
KDIA	Korea Defense Industry Association
KIDA	Korea Institute for Defense Analyses
MADS	Modified Air Defense System
MLRFRP	Medium and Long Range Force Requirement Plan
MND	Ministry of National Defense
MOA	Memorandum of Agreement
MOD	Modernization Program
MOU	Memorandum of Understanding
MTCR	Missile Technology Control Regime
NBC	Nuclear, Biological, and Chemical
NMD	National Missile Defense
NPT	Nuclear Non-proliferation Treaty
PAC	Patriot, Advanced Capability
PRC	People's Republic of China
RFP	Request for Proposal
ROK	Republic of Korea

ROKAF	Republic of Korea Air Force
RSC	Required Service Component
SAM	Surface-to-air Missile
SIPRI	Stockholm International Peace Research Institute
SSM	Surface-to-surface Missile
T&E	Test and Evaluation
THAAD	Theater High Altitude Area Defense
TMD	Theater Missile Defense
US	United States
WLCC	Working Level Coordination Council

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Vita

Captain George Hutchinson was born on 7 September 1963 in Washington, DC. Shortly after graduating from Crossland High School in 1981, he enlisted with the Air Force, first serving as a freight traffic specialist and later as a cryptologic Korean linguist. He graduated from the University of Maryland with a Bachelor of Arts degree in Asian Studies in 1990. In addition, Captain Hutchinson graduated with honors from the Korean Basic Course at the Defense Language Institute in Monterey, California in 1986, and graduated from the Yonsei University Korean Language School in Seoul, South Korea in 1991. After reaching the rank of Technical Sergeant, he was selected to attend Officer Training School, where he graduated with distinction on 21 January 1994. He earned his regular commission on 16 November 1994.

His first assignment as a commissioned officer was at Misawa AB, Japan, where he served as a logistics plans officer. Prior to that, he served in assignments at Loring AFB, Kunsan AB, Osan AB, the Special US Liaison Advisor Korea, and the National Security Agency. In June 1997, he entered the School of Logistics and Acquisition Management, Air Force Institute of Technology.

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