

## 2006 NATIONAL DEFENSE REPORT REPUBLIC OF CHINA

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#### **President's Foreword**

Chen Shui-bian
President
Republic of China (Taiwan)
August 14, 2006

Taiwan's goals for national defense are to safeguard national sovereignty and territorial integrity, to proactively prevent the outbreak of war, and to protect the lives and property of the 23 million people of Taiwan. For more than five decades, China, on the opposite shore of the Taiwan Strait, has not once renounced the use of military force to annex Taiwan. Not only does this represent the most serious threat posed to Taiwan's national defense, but also the gravest challenge to Taiwan's continued survival.

The September 11 terrorist attacks on the United States have redefined and reshaped the concept of national security. National security is now challenged on a multitude of fronts due to the continual emergence of non-traditional threats such as terrorist attacks, the proliferation of weapons of mass destruction and ballistic missiles, conflicts over and safeguarding of basic energy supplies, and the spread of serious contagious diseases.

Over the past few years, Taiwan has responded to developments in the cross-strait military balance and global security by striving to consolidate its defense capabilities and ensure national security. In the same vein, the publication of the "National Defense Report" aims to bolster the awareness and understanding of Taiwan's people and the international community on Taiwan's national defense issues by making relevant information both public and transparent. This should also, in turn, encourage Taiwan's people and the international community to give their full support to our major defense-building efforts.

In the past, confrontation between the two major political blocs—East and West—was at its most intense in Europe. Nonetheless, the end of the Cold War and the founding of the European Union, along with its continual expansion, has completely changed the face of security threats met by European nations. Major steps have been taken towards creating a Europe vested with greater freedom, democracy, peace, and prosperity.

In contrast, however, a high degree of uncertainty and conflict continues to prevail in the Asia-Pacific region—be it on the Korean Peninsula or across the Taiwan Strait. In particular, China has moved swiftly in expanding its military prowess in an attempt to project its strategic lines of defense beyond that of the first island chain. This poses a serious threat to the security and stability of the entire region, casting huge shadows on, and bringing new variables to, the efforts of Asia-Pacific nations in achieving lasting peace.

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Since 1989, China's national defense budget has grown annually at a double-digit rate. Facing no apparent threat, China's military expansion far exceeds what is needed for self-defense. Many Asia-Pacific nations, including the United States and Japan, have shown great concern over this. As a member of the world's free democracies, Taiwan has to shoulder the responsibility of its own self-defense and make contributions to the creation of a freer, more democratic, and more peaceful world.

The people of Taiwan love peace. Even more so, they long for lasting peace in the Taiwan Strait. Peace, however, must be backed up by a solid national defense. While striving to pursue lasting peace in the Taiwan Strait, Taiwan must not neglect to enhance and strengthen its defensive capabilities. To ensure that the status quo of Taiwan's freedom, democracy, prosperity, and peace is not changed unilaterally, the people must forge a consensus on national security. This will allow effective and powerful defense capabilities to be developed in order to deter and prevent military conflict.

In response to China's increasing military threat, Taiwan's military has made tremendous efforts in building up its defense capabilities and improving combat readiness in recent years. A comprehensive transformation of the military has been promoted through the launch of reforms in the military's organization, troop strength, equipment, codes of conduct, personnel, and education. It is hoped that, through such reforms, a modern, powerful, and high-quality national defense force, composed of the appropriate number of personnel and demonstrating strong combat capabilities, can be established.

Furthermore, Taiwan has adopted countermeasures concerning the three strategic warfares—legal contention, propaganda contests, and psychological assaults—that China's People's Liberation Army has begun to wage against Taiwan. By promoting national defense education for all citizens, the government hopes to make the people more vigilant concerning potential enemies and instill in them a consciousness of the potent threat they may face so as to reinforce their psychological defenses. Since these measures will be of great assistance in ensuring Taiwan's national security, they deserve the attention and support of all of Taiwan's people.

In closing, I would like to once again express my sincere appreciation and respect to the military's leading cadres and soldiers for their hard work and to their families for their longstanding devotion and support. Moreover, I call on our fellow citizens to express love for their country by continuing to render unwavering support and care for our armed forces, which will, in turn, help them grow stronger and become the best defensive power and protective shield for Taiwan's sustainable development.



#### **Minister's Foreword**

The essence and purpose of national defense of the Republic of China (ROC) is "all-out defense." The public's understanding of, support for, and participation in defense matters is the basis of a robust all-out defense. In order to promote understanding of defense administration and encourage citizens to support and participate in defense affairs, the Ministry of National Defense publishes a defense report once every two years. This report provides a general overview and assessment of changes in the defense and security environment and the ROC Armed Forces' hard work on military buildup and combat readiness over the previous two years. It also systematically explains the key points of defense administration during the current period and our vision for future policy. Besides helping realize the concept of all-out defense, the "defense transparency" exemplified by the publication of this report also lets other countries and the international community understand our defense policy and military strategy, and thereby promotes military cooperation and avoids misunderstandings. This report could therefore enable the international community to understand and support Taiwan's role as the "guardian of peace across the Taiwan Strait."

Looking back on the past few years, globalization and information technology have caused major changes in the international security environment. The security challenges faced by the ROC are therefore becoming increasingly complex. Among these challenges, China's ever-growing military threat is the biggest menace to our country's survival and development. China has consistently refused to renounce the use of force against Taiwan. In recent years, China has actively acquired new types of weapon systems from foreign sources, deployed them along its southeast coast, and continued to hold large-scale military exercises simulating attacks on Taiwan. Besides its military buildup, China has also stepped up opposition to Taiwan on the political and legal fronts. For instance, in March 2005, China passed the "anti-secession law" which effectively authorizes acts of war against Taiwan. In addition, in an effort to weaken Taiwan's legal status and shake our people's morale, China has launched the "Three Warfares;" legal, psychological and public opinion, against Taiwan and the international community. The circumstances make it obvious that China is a real, direct and steadily increasing threat against our national security. The ROC Armed Forces need to constantly seek improvement in their military buildup and armament readiness if they are to cope with this challenge, maintain the military balance across the Taiwan Strait, and safeguard national security.

Keeping peace across the Taiwan Strait is our nation's key mission, and is the common expectation of our citizens. The possession of a strong defense capability is a necessary precondition to maintaining peace and deterring or curbing any actions that might jeopardize peace and security. In the face of China's formidable military threat, apart from a fierce determination to defend ourselves, we ought to also possess substantial and effective modern defense forces. Without adequate defense



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sive strength, no matter how much goodwill we show China, and no matter how many peace initiatives we make, a lasting, solid peace would remain beyond our grasp.

In order to establish a strong defensive capability and improve professionalism and performance, in recent years the ROC Armed Forces have striven to promote the reengineering of defense organizations and realize a "revolution in military affairs." The first-of-its-kind "2006 National Security Report," issued on May 20, 2006, explicitly elaborates on the ROC's national security strategies. The main strategy of "accelerating defense transformation, establishing a quality and streamlined defense force" lays out guiding directions for the continued upgrading of the ROC Armed Forces. Looking towards the future, despite limited resources, we intend to create an integrated defense force via the systematic reform of the Armed Forces' organization, military structure, strategic thinking, weaponry and equipment, development of guidelines, and human resources. We expect these efforts to boost our overall military strength, give the Armed Forces the ability to adapt to changes in the strategic environment and cope with ever-shifting challenges, and transform the ROC Armed Forces into a rigorous military capable of preventing and winning wars.

The content of this defense report underscores the connection between the ROC Armed Forces' efforts to realize "defense transformation" and the goal of "all-out defense." We hope that all citizens would understand the importance and urgency of the Armed Forces' transformation and upgrading. We believe that this understanding will win us the public's support, enable the integration of necessary resources, and strengthen public resolve. It is our wish that we together ensure national security and create sustainable national strength and vitality.

The publication of this report symbolizes the ROC Armed Forces' determination to keep improving, embrace change, and avoid complacency. The Armed Forces shall continue to uphold a philosophy of both reform and pragmatism in the future, and shall rely on innovative, transformative thinking and pragmatic, feasible actions to facilitate military buildup and readiness tasks, yielding to a highly-competent, modern defense force. I personally hope that everyone in the ROC Armed Forces would remember their mission of protecting the people in their daily routines, and would always give their full effort. I also expect all citizens to give their full support and encouragement to our dedicated, hard-working armed forces personnel, continue to show concern for our defense administration, provide suggestions, and urge the ROC Armed Forces to keep moving forward and improving, so that we can always accomplish our mission of ensuring national security and maintaining peace across the Taiwan Strait.

Minister

Lee Jye August 2006

### **Prologue**

The ROC is dedicated to realizing democratic governance, protecting freedom and human rights, promoting the people's welfare, and pursuing harmonious regional developments in East Asia. Its Armed Forces have consistently carried out their mission in accordance with the ROC Constitution, made constant adjustments to meet real defense needs and changes in the environment, and continued to maintain a strong and vigilant defense in the face of the PRC's harsh rhetoric and saber rattling. As guarantor of the nation's survival, the ROC Armed Forces protect such basic values as democracy, freedom, and human rights.

The Ministry of National Defense regularly compiles and publishes defense reports in accordance with Article 30 of the National Defense Act. These reports are intended to explain to citizens the nation's defense and security affairs, defense policy goals, and major military buildup and combat readiness measures, while promoting defense affairs transparency, and realizing the goal of all-out defense. Guided by the National Security Council's "2006 National Security Report," this defense report focuses on the theme of "defense transformation." It differs from the conventional layout of the previous report which was presented according to the list of policies implemented. This report expounds the theme in three parts "Facing the Challenges," "Innovative Transformation," and "All-out Defense," containing a total of 12 chapters. The following is a brief summary of each part:

#### **Part 1 Facing the Challenges**

This part contains the four chapters "The Evolving Security Environment," "PRC's Military Development," "PRC's Military Threat to Taiwan," and "Domestic Factors." It surveys the strategic environment and main challenges faced by the Armed Forces, and discusses the driving forces behind defense transformation. This section also provides an explanation of the internal and external factors that are driving military reform and transformation.

#### **Part 2 Innovative Transformation**

This part contains the five chapters "Adjusting Military Strategy," "Re-engineering Organizational Functions," "Consolidating Quality Manpower," "Building Modern Weaponry," and "Enhancing Joint Operation Capability." It explains how the ROC Armed Forces are responding to challenges and the specific actions being taken to realize reforms and transformation, including adjustment of military strategy, re-engineering of organizational functions, improvement of manpower, establishment of modern weapons systems, and enhancement of joint operation capability. These actions are intended to eliminate obstructions, establish superiority, build up strength, and overcome challenges.

This part contains the three chapters "Concept and Vision of All-out Defense," "Interdependence of Defense and Society," and "An All-out Support for and Participation in Defense." It explains how the country's defense preparations and the Armed Forces' transformation are based on an "all-out defense," which calls for the people to understand defense concepts, identify with the nation's defense, and mobilize to support and participate in defense. This will achieve a defense consensus assuring national security and realize the goal of strength in unity.

#### Introduction

Deliberated around the theme of "defense transformation," the 2006 National Defense Report (NDR) is divided into three major parts, namely, "Facing the Challenges," "Innovative Transformation" and "All-out Defense." The purpose of such division is to elucidate future challenges facing the ROC Armed Forces and our aggressive pursuance for defense transformation and execution of defense affairs in meeting these challenges, and to achieve an all-out defense strategy fully recognized, involved and supported by fellow citizens. To facilitate the people's understanding of the basic arguments and visions of this NDR, major topics are presented along the lines of "defense policy execution through transformation," "main thrust and momentum for defense transformation," "fundamentals and implications of defense transformation," "core values and visions of defense transformation" and "defense transformation based on all-out defense." These are expounded as follows:

#### **Defense Policy Execution through Transformation**

Facing the multifaceted challenges of current global environment, our defense policy calls for "war prevention," "homeland defense" and "counter-terrorism and contingency response" as the three fundamental objectives. The establishment of these objectives is based on the vision of "preventing war," "maintaining the stability of Taiwan Strait" and "defending the national soil" disclosed in the 2002 NDR and further clarified in the 2004 NDR. The continued emphasis of "war prevention" and the "five no's policy" of "no development, no production, no acquisition, no stockpile and no deployment" regarding nuclear, biological and chemical (NBC) weapons have kept the ROC Armed Forces holding fast to the just cause of seeking-peace and non-provocation. The "homeland defense" guideline emphasizes the determination and will of the ROC Armed Forces in deterring any invading forces through modern joint operations and integration with an all-out defense by our fellow citizens. The "counter-terrorism and contingency response" guideline emphasizes the construction of a fast-responding force capable of conducting swift and effective actions against non-traditional threats to achieve the goal of "preventing external attacks and internal coups."

#### 1. War Prevention

The greatest challenge facing our national security is the PRC's military threat. And the main purpose of ROC Armed Forces' military buildup and readiness programs is to address such threat. Article 137 of the Constitution of the Republic of China states, "The national defense of the Republic of China shall have as its objective the safeguarding of national security and the preservation of world peace." Hence, "war prevention" is the fundamental defense policy while "invasion deterrence and peace preservation" is the ultimate goal for all military efforts. To prevent unnecessary conflicts inflicting civilian casualties, damaging our livelihood and undermining national develop-

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ment, the ROC Armed Forces must seize every opportunity to gain relative superiority over the Taiwan Strait through appropriate military infrastructure and armament readiness to deter any military invasion from the PRC.

#### 2. Homeland Defense

The main purpose for the existence of a national military force is to conduct effective military operations under proper command authority in times of crisis. The military force is expected to deter any foreign threats and pursue victory. Article 141 of the Constitution of the Republic of China states, "The foreign policy of the Republic of China shall, in a spirit of independence and initiative and on the basis of the principles of equality and reciprocity, cultivate good-neighborliness with other nations, and respect treaties and the interests of Chinese citizens residing abroad, promote international cooperation, advance international justice and ensure world peace." Therefore our military buildup and employment of forces also adopt a defensive stance and will neither provoke a conflict nor initiate any preemptive strike. In the face of a hostile military action or foreign invasion, however, all necessary means of self defense will be carried out. Thus, in peacetime the ROC Armed Forces must build up its defensive and deterrent capabilities that can produce "strategic endurance but tactical expeditiousness." This is to ensure defensive deterrence and warfighting activities can be conducted in a prompt and effective manner to guarantee the security of our homeland when war is inevitable.

#### 3. Counter-Terrorism and Contingency Response

Globalization brings with it the continuous expansion of multifaceted security threats to modern societies. The responsibilities of the ROC Armed Forces have since expanded from fulfilling traditional military responsibilities to engaging in national security support missions during major crises, and in counter-terrorism activities and emergency disaster reliefs. Under the unified command of the Executive Yuan, the ROC Armed Forces conduct operations with other government agencies to ensure the safety and security of civilians and their properties. Such crisis prevention and management activities require effective early warning and management systems to acquire early intelligence and information to prevent crisis escalation. In time of crisis, the ROC Armed Forces will devote itself to the supporting measures under the unified command of the Executive Yuan and conduct efforts including, but not limited to, crisis intervention, damage control, public safety and recovery programs. The goal is to resolve the crisis in a prompt manner while maintaining the safety and security of our citizens. Furthermore, the ROC Armed Forces routinely conduct exercises that focus on dealing with possible special operations, infiltration and guerilla warfare tactics by the PRC military. The goal is to construct a fast-responding force capable of maintaining the security of our nation and people.

To realize the fundamental goals mentioned above, each and every military buildup and readi-

ness effort at this current stage requires us to push for necessary transformation in order to build a fast-reacting, highly effective modernized force capable of fulfilling multifaceted defense missions. We expect to "enhance our capabilities through renovation and in turn ensure peace through our capabilities" so as to effectively protect the safety and security of our nation and people.

#### **Main Thrust and Momentum behind Defense Transformation**

In the face of various defense challenges, it is necessary for the ROC Armed Forces to ensure a relatively secure and stable domestic social environment to guarantee the freedom, safety and development of our nation and people. On the international security arena, a fast emerging PRC has resulted in drastic changes in the global and Asia Pacific power structure. The PRC's rapid growing national power, coupled with an increasingly modernized military, is forming a cooperative relationship with the surrounding nations through strategic alliance or diplomatic measures and aggressively imposing its influence on international affairs such as politics, economy, military and resources.

In the meantime, while the PRC strives to become a prominent global power, its military pressure and threat on Taiwan have never diminished. Besides continued combat readiness efforts against Taiwan, the PRC enacted the Anti-Secession Law to formally authorize the PLA to resolve the Taiwan issue with non-peaceful means which makes the law more like a war authorization act. The fast growth of PRC's military capability has gradually resulted in a military imbalance across the Taiwan Strait. The strike range of the PLA guided missiles already covers the entire Taiwan region and its submarines are threatening our maritime routes. PLA's naval and air combat capabilities have already penetrated the first island chain of the West Pacific, reaching Taiwan's east coast. Our defense security is now facing the greatest threat ever and the whole combat readiness effort is increasingly urgent. All factors considered, and given the limited resources available to the ROC Armed Forces, defense transformation is the only solution to a breakthrough in the gradual military imbalance across the Taiwan Strait and to gaining a substantial superiority.

Under the dual influence of information technology and globalization since the 1980s, revolutionary development has taken place in military technology and defense concepts. The types of war and forms of threats keep evolving, making them complex and diverse in nature. In order to address the new defense and military threat, there has been a rising wave of "revolution in military affairs" (RMA) in the international community. And for us as a nation, having successfully undergone economic development and democratic transformation, our society is now much more open and progressive and the people's expectation of our military forces has thus increased. The ROC Armed Forces must therefore adopt every possible effective measure to develop a highly adaptive defense capability to meet the demands of the new century and maintain the sovereignty of the Republic of China in its solidarity and entirety. We must protect the basic values of democracy, freedom and

human rights and promote the economic, social and political development of the country. Since the promulgation of the National Defense Act and Organization Act of the Ministry of National Defense (hereinafter referred to as the Two Defense Acts) on March 1, 2002, the ROC Armed Forces have not only fully executed the requirements of the Two Defense Acts and met popular demands to "reengineer defense organization" and "professionalize defense affairs," they have also kept up with the pace of contemporary trend in military reforms. Besides implementing a RMA-driven military buildup and plan, the ROC Armed Forces have wholeheartedly pursued MND organization and processes reengineering and force structure readjustment, and simultaneously enhanced military education, doctrine and training. The current push for defense transformation is our method for dealing with continuous pressures from our enemies, threat evolution, RMA trends and the internal quest for revolution. This push for defense transformation must succeed our past accomplishments and continue to improve and strengthen the constitution of our forces, and enhance defense capability to ensure national security. As indicated in the "2006 National Security Report" by the National Security Council on May 20, 2006, the national security strategy of Taiwan seeks to "accelerate defense transformation and establish an effective and adequate defense force." This has been the key directive for the continuing push for defense transformation and RMA efforts within the ROC Armed Forces.

#### **Fundamentals and Implications of Defense Transformation**

o respond to changing international circumstances and new forms of threats, major world powers have one by one adjusted their strategic deployments and accelerated national defense reforms in recent years. In the face of China's increasing military threat, besides having the resolve to defend itself, Taiwan must also adopt new perspectives to re-evaluate its security defense concepts and re-adjust armament preparedness strategies in order to strengthen its self-defense capability.

 "2006 National Security Report", National Security Council, May 20, 2006 "Defense transformation" is the unified development in the defense domain which integrates concepts, methods, organization, resources, technology, equipment, doctrines and other important factors. "Defense transformation" is a continuous and integrating process seeking fundamental and ground-breaking revolution with a goal to create a national military capable of adapting to strategic environment changes, deterring multifaceted defense challenges and

safeguarding the nation.

A reasonable defense transformation must at least possess the three ingredients of fundamentality, synergy and continuity. "Fundamentality" means that the goal of transformation focuses not

Defense Transformation:

- " A complete examination and improvement of the overall defense organization, military doctrine and weapon system in dealing with new strategic environment and threats."
- "Military Terms and Glossary Diction—ary", Ministry of National Defense, ROC, March 15, 2004.

branches. Synergy calls for an abandonment of individual development path and seeks integration of all revolutionary elements to reach an overall breakthrough and obtain synergistic effects. "Continuity" indicates that the transformation itself is an enduring implementation and adaptation process. No transformation steps and targets can be reached immediately. In the course of the transformation process, we must continuously adapt to the changing environment and make flexible adjustments so that we may excel our enemies and pass the rigorous tests of the existing environment. On the execution front, defense transformation is the multi-disciplinary integration efforts of the military under the guidance of national security and defense policies through innovative measures covering strategic planning, resource allocation, joint operation, weapon acquisition, organization reengineering, training, doctrine development and military education.

#### **Core Values and Vision of Defense Transformation**

After carefully considering all major driving factors such as the external security situation, PRC military threats, defense resources and domestic political and economic influences, the ROC Ministry of National Defense proposes "stable transformation" and "effect-driven" as the core values to thrust the various revolution measures. Based on the principle of "pragmatism, progressiveness and continuity," the ROC Armed Forces will pursue multiple concrete revolution measures through suitable and feasible means to elevate a variety of capabilities. On the basis of an "all-out defense," we will attain the basic defense goals of "war prevention, homeland defense and counter-terrorism and contingency response" to preserve the current peace status and long term development of the nation.

Defense transformation is not only limited to the vision and philosophy of the Armed Forces' overall future development, but is also an integrated realization of the overall military buildup and combat readiness. Realization of these measures requires implementation through concrete actions. To effectively tackle the constant buildup of military threats from the PRC, the ROC MND has taken a forward looking stance into our future defense manpower needs and decided that the defense transformation of the ROC Armed Forces must aim to be "knowledge-based," "professional,"

A professional military is also a knowledge organization; from tactical maneuver to strategic planning, it requires a great amount of knowledge integration. The future of defense is "knowledge defense."

— President Chen Shui-bien, opening speech at "4<sup>th</sup> Taiwan Defense International Conference," February 29, 2004.

It is our conviction that only a swift "revolution in military affairs" (RMA)—its structure, doctrines, trainings and equipments—can transform the ROC Armed Forces into a knowledge—based power of the next generation, converting knowledge to military capability in order to effectively counter impending threats,

—President Chen Shui-bien, Presidential Remarks, 2004 National Defense Report, December, 2004.

On this key moment of defense transformation for the ROC Armed Forces, we should apply new vision and thinking based on the spirit of "Upholding Core Values, Seeking Innovative Breakthrough" ....to advance our troops and elevate the overall quality of our armed forces in creating an elite defense team.

—Lee Jye, Minister of National Defense, "2005 Annual Training Review Conference" speech, Sep 29, 2005 "technology-driven" and "joint." It will vitalize and renovate our defense organization along the four main dimensions of "strategy," "organization," "manpower" and "combat capabilities." It is hoped that, through "a highly effective organization and manpower" and "strategies and combat capabilities capable of adapting to new challenges," we can create a highly effective warfighting force capable of winning any war.

Being "knowledge-based" and "professional" implies managing the "knowledge and technology intensive" characteristics of modern defense and military affairs and the trend of "military professionalism." Details including the design and operation of the organization must possess flexibility and adaptability. The internal environment and the culture within the organization must break the inertia and traditional skirmish among bureaucrats, increase jointness, allow different opinions, encourage innovative thinking and create organizational learning. The allocation and employment of organization manpower must fulfill the professional spirits and the required responsibilities. Current planning and concrete measures include

the functional reengineering of the defense organization, reshaping organization culture, enhancing professional military education, fostering and managing of elite civilian officials and renovation in recruitment system to build a highly effective and organic organization.

Being "technology-driven" and "joint" implies that the ROC Armed Forces must reexamine existing strategies and behavior models under combat environments utilizing current or emerging technology conditions. We must attempt multi-dimensional thinking and draft new strategies for fu-



ture threat scenarios and construct relevant combat capabilities to meet challenges of possible warfare or armed conflicts. The most important concept is "jointness," meaning not only the jointness
in manpower and fire power but, most importantly, the jointness in "concepts." In other words, the
consideration of joint operations must go deeper into the layers of strategies, tactics and methods,
C<sup>4</sup>I, organization architecture and table of organization (TOE), troop formation and mission, organization culture and habits, doctrine, manuals and exercises to integrate individual forces (branches)
into a truly joint military force. The goal is to form an "integrated" military force with "synchronized"
combat capability and the ability to conduct "active and fast-response" operations. Current plans
and concrete measures include military strategy adjustment, integrating current combat capabilities,
enhancing joint operations mechanisms and capabilities and acquisition and management of modern
weapon systems. The expected result is a "peacetime deterring and wartime decisive" fighting force
with core "joint operations" capabilities.

#### **Defense Transformation Based on All-Out Defense**

As stated in Article 3 of the National Defense Act, the nature of the ROC defense strategy is

of "all-out defense." An "all-out defense" is the joint representation of the overall strength of a nation as a whole, the basis for deterring war and dealing with crisis, and an important concept and vision for the execution of national defense. Modern defense affairs are not limited to a purely military domain

he national defense of the Republic of China is of all-out national defense, involving affairs pertaining to military, civil defense and those in political, economic, psychological and technological domains, which may directly or indirectly contribute to the national defense.

- Article 3, National Defense Act

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The relationship between the Armed Forces and its society must be mutual and interactive. The military must fulfill the expectations of its citizens, community and nation; properly perform its duties in protecting the nation and support the communities in a professional manner. On the other hand, the Armed Forces need the support and trust of all citizens; defense affairs need the involvement and cooperation of the people to fulfill the quest for an "all-out defense." Only through full participation from its citizens in different domains can the synergistic effects of our nation's combat capabilities come to full play to guarantee national security and protect national interests.

The fulfillment of an "all-out defense" requires all civilians' accurate understanding of, full support of and involvement with defense affairs. It's especially important that we acquire full recognition and support from our people at this key junction when the ROC Armed Forces are aggressively pushing for defense transformation to acquire a sense of unity. To achieve the all-out defense goal, the MND has conducted concrete efforts along the three axes of "consolidating the willpower of all-out defense," "integrating national defense with society and industry" and "encouraging the people's support of and participation in national defense." It hopes to build the public's awareness of potential crises, consolidate and integrate the will and strength for an all-out defense, and earn concrete support and participation from all people so that the ROC Armed Forces may acquire necessary resources, recruit professional personnel, and reinforce military-civilian cooperation. Coupled with a momentum for military transformation, the Armed Forces will then be ready to meet future challenges.



Introduction







# Chapter 1

#### >>>

- I. Global Security Environment
- II. Asia-Pacific Security Development
- III. Cross-Strait Security Status
- IV. Taiwan's Strategic Role in Asia-Pacific Security

# The Evolution Security Environment

A major driving force in national defense reform comes from a country's assessments of its external security environment. Under the current wave of globalization, boundaries between nations are not as obvious as they were before, and international exchanges have become more sophisticated.

Global and regional political, economic, or military changes may affect other nations, forming the "global village" phenomenon. Therefore, analyzing trends in the global, Asia-pacific, and cross-strait security status allows an understanding of Taiwan's security position and its strategic role in Asia-Pacific stability.

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### I. Global Security Environment



The current global security environment development is in a dynamic equilibrium of the international political system, in which the United States (U.S.) acts as the leading superpower. Under this system, however, there are still other countries with considerable influence on their respective regional affairs. For example, the rise of the European Union (EU) and the PRC has cast potential challenges over the U.S. power, instilling uncertainty into the re-arrangement of the world power order. Also, regional armed conflicts have resulted in an increasing emphasis on international conflict prevention and risk management through security cooperation. The emerging unconventional security threats and their characteristics will result in wide-ranging impacts upon the international community, which may further heighten the borderless, contagious and risk-sharing nature of the threats. Taiwan anxiously developing newly capabilities to ensure national security in response to current and upcoming multiple threats, the RMA policies animated by information revolution and state-of-the-art developments have not only attracted attention from major countries around the world, but also brought about uneven opportunities and challenges to the military of different countries.

#### 1. "Uni-polar" Structure of International Political System

Since the end of the Cold War in the 1990s, the international political system has been in a "uni-polar" structure. Generally, the U.S. is the sole superpower in the world. With areas of responsibility reaching most areas around the world, the U.S. has the greatest overseas force deployment and military buildup ever made. However, although the U.S. is politically and economically significant, several powers in the world, including the PRC, Russia, the EU, India, Japan, etc., still exert considerable influence in sub-regions, causing a complex relationship of both competition and cooperation in international political and economic interactions.

Currently, the basic power structure of a "uni-polar" system is deemed to be relatively stable. However, under the 21<sup>st</sup> century globalization trends and growing political and economic integration between regional powers, vertical and horizontal interaction in different political and economic issues will become more complex, leaving some possibility for changes of power distribution in the sub-regions. In particular, the EU's pursuit of political integration, and the increasing political and economic strengths of Brazil, Russia, India, and the PRC may turn the global power structure into a multi-polar system.

#### 2. PRC's Rapidly Rising International Stature

Among the current emerging great powers, the PRC is the most prominent. Since the PRC's economic reforms in 1979, its overall national strength has increased rapidly, and it gradually took on major roles in regional and global affairs. In recent years, the PRC has improved relations with neighboring countries such as India, Vietnam, Russia, Kazakhstan, Kyrgyzstan, and Tajikistan, made strategic partnerships with Russia and several major countries, and initiated the Shanghai Cooperative Organization (SCO) to stimulate regional trade and ensure the security of its western borders. To realize all of its foreign policies, the PRC has started actively improving its relations with neighboring countries since 1990. At that time, Central Asian countries and the PRC had to deal with separatist movements, including the Xingjian separatist movement, which also affected Central Asia. However, after the 911 incident, the American influence began to propagate to central Asia due to its war against terrorism. Suspecting that American influences may indirectly hamper its developments, the PRC actively expanded SCO membership and operations in coordination with Russia in an attempt to consolidate its sphere of authority, and gradually diminish and eliminate American influence in the region. On the other hand, the PRC continues to participate in United Nations (UN) peacekeeping roles and anti-terror cooperation with the U.S. after September 11, and acts as a major negotiator in Six-Party Talks of North Korean nuclear weapon issue. Besides actively participating in international affairs, the PRC also uses its solid economic foundation to reap strategic benefits from foreign policy and economic interaction. For example, in recent years, the PRC state-run oil corporation is actively buying out foreign oil companies, which is seen as a major deployment of its global energy strategy.

The international community has divergent opinions of the PRC's rising prominence. There are rational reasons to see the PRC as a peacefully developing country or a threat. However, since the PRC is still one of the few authoritarian countries in the world, its decision-making processes are not relatively transparent, and it was observed to have infringed upon human rights and suppressed democracy and free speech on several occasions. These factors, coupled with its continual expansions, of military power, have caused the international community to remain relatively concerned about the PRC's developments. In recent years, the U.S. has repeatedly called for the PRC to be a "responsible stakeholder" in international system, and to improve transparency in its defense affairs. This heightens international expectations for the PRC to play a stabilizing and positive role on the world stage. In other words, it is hoped that, as the PRC integrates into the international political and market economy system, it will fulfill its responsibilities as a regional power. All in all, the pervasive effects of the PRC's emergence have politically, economically, or militarily become the most concerning strategic opportunities and challenges to its surrounding countries and major world powers.



#### 3. Persistent Threats of Regional Conflicts

Overall, the global security environment in the 21<sup>st</sup> century is inclined to develop along the lines of mutual benefit and bilateral and multilateral cooperation. However, a relatively stable international security environment does not guarantee the decline of regional armed conflicts. Despite emphases on international economic developments and cooperation in recent years to avoid using military means to resolve disputes, different factors of histories, ethnicities, religions, sovereignties, and natural resources in different regions never cease to cause confrontation and conflicts. Risks of regional armed conflicts still exist. Although some regional conflicts have been temporarily halted by the intervention from the UN and major regional powers, as long as the root causes of the conflicts remain, they will continue to pose uncertainty to future global security.

Currently, the world's hot spots of potential armed conflicts are located mostly in the Middle East, South Asia, and Northeast Asia. For example, the Israel-Palestine conflicts, Iranian and North Korean nuclear weapon issues, India-Pakistan border disputes, and Taiwan-PRC military confrontation have all once caused or may cause regional armed conflicts. In addition, certain intra-national ethnic separatist movements (such as Chechnyans in Russia and Aceh separatist movements in Indonesia) and internal conflicts in certain African countries also caused caprices in regional peace and stability. Therefore, in recent years, considerable international attention to enhancing bilateral or multilateral security cooperation has aroused hopes that, through group efforts, the possibility of war and conflicts can be diminished to maintain peace and stable regional developments.

#### 4. Unconventional Security Threats

From a conventional security perspective, responding to external military threats is a major issue for national security. However, the age of globalization and information in the 1990s have blurred international boundaries; global social interactions have become more frequent and various unconventional security threats have rapidly emerged. These include terrorism, transnational crime, economic and environmental crises, ethnic and religious conflicts, internet hacking, drug trafficking, and cross-border diseases (e.g. SARS, avian flu, etc.). These threats, though not threatening a country's survival the same way as an outbreak of war, may still cause major negative impacts against sustained national developments, which in turn create different challenges to national security. And because these threats are usually transnational, contagious, constantly changing, and come from diverse sources, nations often cannot respond to them alone, which calls for international and regional cooperation to prevent and respond to these threats.

Globally, the most prominent unconventional threat in the world today is the spread of international terrorism. The September 11, 2001 attack in New York, the October 2002 bombing in Bali, the March 2004 bombing in Madrid, and the July 2002 bombing in the London subway and buses

have all surprised the world with their borderless and indiscriminate natures, low warning levels, and prevalence of terrorism. Also, proliferation of weapons of mass destruction (WMD) increases the threat of international terrorist groups against global security. Therefore, major countries in the world are currently defending against terrorist threats. These types of non-war threats means that the military needs to play with caution, a supportive role in the nation's overall security framework to assist the maintenance of public safety. Military organizations and functions, in turn, need to be more versatile to respond to more diverse and unpredictable security challenges.

#### 5. Technologically Driven RMA

Since the end of the 1970s, rapid progress in computer, communication, and networking technologies have moved human societies from the industrial era to the information era. The information revolution not only affects technology, but also organizations, commerce, culture, and even styles of living. Subsequently, the military is affected as well. For a country in the information age, adequate military application of technology and knowledge is paramount in gaining advantages in war. Other than information technology, technological progress, such as in genetic engineering, biotechnology, lasers, materials, nanotechnologies, etc., are also advancing at an unprecedented pace, providing more technological foundations for the RMA.

International security environment changes also push forth the RMA developments. In relatively peaceful and stable international security environments, many advanced countries have started downsizing and reforming their military, so that they can devote more resources to boost their military's technological conditions and personnel quality. Because of a decrease in, or elimination of, conventional and predictable national security threats, which are replaced by diverse and highly unpredictable unconventional threats, countries need to respond by developing new military capabilities. Under this circumstance of continuous technological innovations and diverse threats, major countries around the world are implementing technology and knowledge-based reforms for their militaries to respond to future threats and risks of warfare. Technological research results and changes are beginning to be incorporated into military organizations, doctrines, and equipment.

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II. Asia-Pacific Security Development



Asia-Pacific security developments at the start of the 21<sup>st</sup> century indicate that the U.S. retains its super-power status in Asia-Pacific regional affairs, with an emergence of the PRC's intent to change the current power balance. Since succeeding the Cold War Era bilateral security scenarios,



#### 1. Continued American Leadership in Asia-Pacific Security Affairs

After the end of the Cold War, the U.S. continues to retain leadership status and important political, economic, and military influence in the Asia-Pacific. The North Korean's test firing of ballistic missiles toward Japanese waters on July 5, 2006 has accentuated that there still exists an uncertainty in the Asia-Pacific region's security and stability. Currently, due to anti-terror and regional conflict prevention operations (e.g. North Korea, Taiwan Strait, etc.), the U.S. is considering adjusting its strategic military deployments in the western Pacific to improve rapid response capabilities against inconceivable crises. Adjustments in American military deployments in the Asia-Pacific aim at consolidating the northeastern Asian bases, which are primarily in Japan. Guam will continue to be the American mid-way stronghold in the Asia-Pacific, and military cooperation will be established in southeast and southern Asia and Oceania, with the hope of connecting the Pacific and Indian Ocean bases, extending the strategic Asia-Pacific defense line, and developing rapid mobile strike capabilities to effectively respond to crises in the Asia-Pacific.

In August 2004, American President George W. Bush, announced the Global Military Adjustment Plan, the emphases of which include: reorganize the command system of the Pacific headquarters, withdraw American troops stationed in non-military zones north of Hanjiang, South Korea, and establish floating marine bases and logistical bases in Thailand. Also, as determined on October 29, 2005, in the American-Japanese bilateral security conference, the 1<sup>st</sup> Army Corps will be moved from Fort Louis, Washington, to Kanagawa, forming a joint combat headquarters with the

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Japanese land defense forces. Patriot III and Standard III missiles will be deployed in Japan. Highspeed transports will be assigned in Guam. The headquarters of the 3<sup>rd</sup> Marine Expeditionary Force and parts of other forces stationed on Ryukyu Island will be moved to Guam in the next 6 years to increase Guam's aerial and naval power. In addition, American and Japanese defense and foreign affairs officials held the "annual security conference" in Washington on May 1, 2006 to discuss the strengthening of the alliance between the US and Japan, regional security issues, global anti-terror operations, and American-Japanese military adjustments. After the conference, they announced a "joint declaration" and issued the "U.S. Military Bases in Japan Adjustment Final Report" that both sides will continue to improve the American-Japanese alliance. The report affirms the cooperation and division of shared strategic responsibilities, missions, and capabilities as negotiated during the October 2005 security conference. It also anticipates completion of the US-Japanese forces redeployment, base integration, and facility returns by 2014. These entail moving the Army's 1st Corps Headquarters to Japanese bases, moving 8,000 combat troops to Guam, reassigning naval jets to Iwakuni base, returning 5 facilities including the Naha military port and Futenma base, deregulating airspace originally controlled by the U.S., enhancing air defense command and missile defense intelligence sharing, building battlefield command training centers and reinforcing joint troop training to improve American-Japanese joint operation capabilities. American military restructuring in the Asia-Pacific indicates that the U.S. plans to focus on this region due to the continuously increasing military strength of the PRC. To preserve its leading status in the Asia-Pacific, the U.S. plans to restructure its forces so as to gain strategic advantage to maintain Asia-Pacific stability and military balance. (Refer to Figure 1-1, American Global Military Adjustment Plan)

#### 2. Impacts on Asia-Pacific Security from PRC Military Buildups

In terms of overall Asia-Pacific security, the main variable is the PRC's rapid and continuous military buildup. Recently, the PRC's overall national strength has been rapidly increasing, and every year there is great increase of defense budgets to reinforce their armaments. These include external purchases and domestic manufacture of high-performance weapon systems, and continued manufacture and deployment of ballistic missiles. The American military report on the PLA in May, 2006, states suspicion towards non-transparency in the PRC's military intentions and defense budgets, and believes that the PLA's ballistic missiles and other strategic weapons have achieved first strike capabilities. It is evident that the PLA's modernized defense buildup intends not only to pose military intimidation against Taiwan but also to surrounding Asia-Pacific countries, especially those with American forces in them. The U.S. clearly warned that the PRC's military expansions have exceeded its needs for invading Taiwan. Also, through the PRC's active nuclear weapon developments and a PLA general stating that they may use nuclear weapons to retaliate against American attacks,





△ Figure 1-1 American Global Military Adjustment Plan

the U.S. side has raised serious doubt about the PRC's nuclear policy. The Japanese government's Defense White Paper issued in August 2005 also stresses that the PRC's defense policy and military development lack transparency, and that the PRC should consider whether its military modernization has exceeded self defense needs. Special attention should be paid to expansions in naval, nuclear, and ballistic missile activities, particularly the developments in the Dongfong 31 long-range ballistic missiles and submarine-launched missiles, and the deployment of short-ranged missiles with regards to its intentions against Taiwan. (Refer to Figure 1-2, PLA Submarine Routes into Japanese Seas)

The PLA's frequent large-scale military exercises, including those in coordination with Russia, indicate that the PRC wants to consolidate its military alliances and resist American-Japanese military pressure to gain leadership over Asia-Pacific affairs. In addition, the PLA submarines in Japanese seas, border disputes between the PRC and Japan in the economic waters of the East China Sea, and Sino-Japanese competition for Russian oil pipelines, make conflicts of interest between the PRC and Japan increasingly obvious, adding serious tension between the two countries. More importantly, the PRC still refuses to abandon military options against Taiwan, and has stipulated the Anti-Secession Law to justify its use of force over Taiwan, which completely contradicts the peaceful development principles it continues to espouse to external audiences. This also mitigates the high

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△ Figure 1-2 PLA Submarine Routes into Japanese Seas

degree of consensus and shared interests on maintaining regional peace and stability between Asia-Pacific countries.

Overall, even though Asia-Pacific countries see economic challenges and opportunities with the rise of the PRC, the PRC's lack of transparent political and military motives cause various countries to harbor uncertainty towards the PRC's rapid military developments. If the PRC continues its rapid military buildup without exercising needed and appropriate transparency, and refuses to abandon the use of force against Taiwan, it will impose pressure on existing regional peace and stability, which no country desires.

#### 3. Maritime Interests Become Major Interests to Regional Nations

Many islands in the Asia-Pacific are involved in long-term sovereignty conflict problems. Many countries' coastlines are close together or overlap with each other, which greatly increases risks for maritime interests conflicts in this region. After the United Nations Convention on the Law of the Sea (UNCLOS) came into effect in 1994, the already intense maritime interests conflicts in the Asia-Pacific became more turbulent. Stakeholder countries expressed their positions through foreign policy announcements or military demonstrations because of issues concerning the sovereignty

Long-term disputes over Asia-Pacific oceans include the Japanese-Russian dispute over the Etorofu, Kunashiri, and Shikotan islands, and the Habomai group islands, Japanese-Korean disputes over the Liancourt Rocks, dispute over the Diaoyu Tai islands between Taiwan, the PRC, and Japan, Sino-Japanese border disputes on the East China Sea's continental shelf over oil and gas exploration, and rights disputes in the South China Sea between Taiwan, PRC, and several Association of Southeast Asian Nations (ASEAN) countries (Vietnam, Malaysia, Philippines, and Brunei). Rights to the South China Sea are more complicated than other sovereign water disputes as it contains rich oil, natural gas and fish resources with many countries getting involved. Its location on major western Pacific sea routes also makes it the focal point of many Asia-Pacific power competitions. In all, maritime interests have high strategic value to western Pacific countries, the importance of which is reflected in ocean resources, sea lines and development of sea power. Thus, conflicts arising from maritime interests disputes have become an uncertainty in the future of Asia-Pacific security.

#### 4. Multilateral Asia-Pacific Cooperation

After the Cold War, the bipolar U.S.-USSR system collapsed, creating an international environment favorable for peaceful development. The high development potential of Asia-Pacific countries have made them important regions of global economic development under the influence of a globalized market economy. To increase their global economic competitiveness and realize benefits of cooperation, many multilateral trade agreements and partnerships have formed rapidly in the region. In particular, the initiatives from the "ASEAN plus 6" (i.e. ASEAN and PRC, Japan, Korea, India, New Zealand, and Australia), "ASEAN plus 3" (ASEAN and PRC, Japan, and Korea), and "ASEAN plus 1" (ASEAN and PRC, Japan, or Korea) summits all indicate intent for regional economic integration. In the future, an eastern Asia economic bloc may probably be formed to compete with their North American and European counterparts.

Comparatively, although multilateral Asia-Pacific security cooperation has received global and regional attention, many objective and subjective factors have limited progress. Currently, the more important multilateral Asia-Pacific cooperatives, such as ASEAN and Asia-Pacific Economic Cooperation (APEC), primarily function to encourage trade and cooperation with a limited role in more sensitive military security issues. They also do not possess collective defense functions like the North Atlantic Treaty Organization (NATO). Although the region has multilateral mechanisms or forums for security issues, such as ASEAN Regional Forum (ARF), Northeast Asia Cooperation Dialogue (NEACD), and Council for Security Cooperation in the Asia-Pacific (CSCAP), none of them are for arbitrating or resolving actual conflicts. They at best provide channels for discussion,

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consultation, or play a role of second-track dialogue platforms. Asia-Pacific security still relies on the legacy of the Cold War arrangements, i.e., bilateral security relations with the U.S. (including official or unofficial U.S.-Japanese, U.S.-Korean, U.S.-Taiwanese, U.S.-Philippines, U.S.-Australian-New Zealand, and U.S.-Singaporean security relationships), which form a dynamic power balance to maintain regional peace and stability. What is worth noting is that the first ASEAN Defense Ministers Conference was held on May 9, 2006, and shall be held annually in the future. The conference has a positive impact in promoting the security cooperation functions of the ASEAN members and serves as a forerunner for the ASEAN Security Community (ASC) in 2020. Currently, Six-Party Talks for resolving the North Korean nuclear weapon issues are slowly taking place. Although there is possibility for institutionalization in the future, it remains to be seen whether it can become a regular mechanism for resolving northeastern Asia security issues.

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#### **III. Cross-Strait Security Status**



In recent years, our government has made numerous public appeals to building a framework of peace and stability for both sides of the Strait. However, without the return of the PRC's goodwill, there have been no positive developments. In March 2005, the PRC passed the Anti-Secession Law, increasing cross-strait tensions. Despite the intimate economic, social, and cultural cross-strait interactions, risk of cross-strait war still remains due to the PRC's refusing to abandon military options against Taiwan and continuing its military buildup. In recent years, the PRC's strategy to Taiwan can be observed from political, economic, military, foreign, and psychological dimensions. They are explained as follows:

#### 1. Political Coercion

After Hu Jintao became the PRC's National Chairman, there have been no drastic changes in the PRC's main policies towards Taiwan. He still insists that so long as Taiwan recognizes the "one China principle," issues of cross-strait hostilities, economic cooperation, cross-strait interactions, and Taiwan's international survival can be negotiated. Influenced by ethnic and unification mentalities, the PRC still views Taiwan as a provincial government and refuses to open political talks on equal terms. Considering Taiwan's independent sovereignty and overall security, it naturally cannot accept the "one China principle" defined unilaterally by the PRC and unequal terms of negotiations. Because of these differences in understanding, there is a lack of trust and chances of short-term political breakthroughs are limited in the short-term. Also, the PRC's continual enhancement of its mil-



itary deployment against Taiwan, legislation of the Anti-Secession Law, the "three warfares" policy (public opinion warfare, psychological warfare and legal warfare), and repeated interference against Taiwan's efforts to participate in various governmental, private, and international organizations have made the hostile cross-strait relations ever more complex and intricate. All of these aggravated the people in Taiwan to feel antipathy towards the PRC administration. In the future, the PRC will continue to enhance its strength of "united front" against Taiwan, compete for civilian recognition to affect cross-strait policy, and force Taiwan to accept the "one China, two systems" political claim.

#### 2. Economic Magnetism

In recent years, cross-strait economic interaction has increased rapidly. The PRC has become Taiwan's largest trade partner, increasing Taiwan's economic dependence on the PRC. For example, in 2005, trade between Taiwan and the PRC was approximately \$US93.4 billion, making up 27.5% of Taiwan's total trade volume. Surplus with the PRC was \$US49.79 billion, compared to Taiwan's overall surplus of \$US4.857 billion. Cross-strait trade has been going on for over 20 years, and the PRC has become Taiwan's largest export market and source of surplus, indicating that Taiwan's economic dependence on the PRC can no longer be ignored. The PRC believes that by increasing Taiwan's economic dependence on the PRC, it is rendering its best strategic means of "using economy to oppose independence and using business to facilitate talks." Therefore, it actively seeks to influence our ruling government via the opposition party's appeal for a prosperous economy by offering 15 benefit policies for Taiwanese investors in the PRC, targeting, in particular, those in competitive high-tech industries. In doing so, the PRC intends to show its "expectation for the people in Taiwan" and to deepen its economic infiltration on Taiwan towards a united front. Currently, over 60% of information technology and hardware products in Taiwan are manufactured in the PRC. This ratio has raised alarms amongst outsiders regarding Taiwan's industrial gaps. Also, the PRC plans to invest \$US10 billion to attract information technology companies in Taiwan. Its 15 benefit policies for Taiwan, proposed in the 2006 cross-strait economic and trade forum, will further accentuate the PRC's economic magnetism effects on Taiwan. If cross-strait relations worsen in the future, the PRC may place trade restrictions on Taiwan to inflict economic damage, paralyze the Taiwanese economy, and sack Taiwan's morale. It is predicted that the PRC will open up more economic benefit policies for companies in Taiwan, and achieve its political objectives of "using economy to oppose independence, using business to facilitate talks, using people to urge officials."

#### 3. Military Intimidation

To prepare for military combat against Taiwan, the PLA is enhancing military preparedness against Taiwan with an emphasis on winning "local wars under the condition of informationaliza-

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tion." It is pursuing various military modernization plans, focusing on improving joint operation mechanisms, researching and purchasing advanced weapons (e.g. cruise missiles, large battleships, newgeneration fighters, and strategic nuclearpowered submarines), enhancing the nonmilitary "three warfares" exercises (i.e. implementation of the Political Work Act, which designates public opinion warfare, psychological warfare, and legal warfare against Taiwan as official warfare tactics), enhancing military construction along the southeastern seas (i.e. integrating and expanding airports and ports) and Taiwanspecific exercises (i.e. the Guangze and

nformation Warfare; When modern warfare uses large amounts of information technology and weapon systems, it creates information network-based battlefields, which involves competition for information control through communication, radar, missiles, computers, satellites, and laser technologies and equipments to influence the outcome of war. Information warfare makes the battlefield more transparent, troops more coordinated, operations more synchronized, strikes more precise, and battlespace more extensive. Their warfare modes include command and control warfare, electronic warfare, intelligence warfare, psychological warfare, economic warfare, and cyberwarfare.

Donghai exercises), striving for secrecy, and deliberately misguiding potential enemies. Also, the PRC continues to import advanced weapons from Russia and advanced countries to raise its rapid response and precision strike capabilities, which has gradually tilted the military balance over the Taiwan Strait to its favor. To enhance their military intimidation against Taiwan, the PLA has drastically increased its missiles deployed on the southeastern coast and stationed various new types of combat aircraft and ships in southeastern airports and ports to exert more threat against the ROC Armed Forces.

#### 4. Diplomatic Interference

As the PRC's comprehensive national power increases, it takes on active roles in regional and global affairs. In recent years, the PRC's active military buildup and aggressive actions in the energy market raised suspicions from the international society. Also, to demonstrate its status as a major power, the PRC has participated in UN peacekeeping missions, enhanced the functions of SCO, and actively participated in the Six-Party Talks. These serve to protect its own interests and also confer advantages in forcing the international community to demand that Taiwan adopt the "one China" policy, which endangers Taiwan's national survival. For example, in March 2003, Taiwanese medical professionals could not attend the World Health Organization's (WHO) post-tsunami health conference because of the PRC's objections. In September 2003, a consensus was reached between Taiwan and the U.S. on the American Cargo Safety Inspection (CSI) policy, but the PRC demanded that the U.S. sign the policy with Taiwan in an unofficial capacity. In October 25, 2005, the PRC used attractive economic incentives to lure Senegal to sever diplomatic relations with Taiwan. During his visit to the U.S. in April 2006, Hu Jintao requested that the U.S. intervene in Taiwan's independence movements and further used the Anti-Secession Law to intensify foreign policy conflicts against Taiwan. The PRC is now preying on Taiwan's major foreign policy connections in Latin America and Africa in a persistent effort to alienate Taiwan diplomatically.

#### 5. Social United Front

The PRC's current strategy against Taiwan is to "strive for talks, prepare for war, and remain patient." Hu Jintao intends to psychologically infiltrate Taiwan and expand his united front to the public in Taiwan. Although the PRC expresses friendliness towards Taiwan economically and socially, there may be subtle political meaning within. For example, recently the PRC announced benefits for students in Taiwan to study in the PRC, allowed Mainlander tourists into Taiwan, held two large cross-strait religious events, allowed Taiwanese fruits to be shipped to the PRC tax-free, awarded pandas to Taiwan, etc., to befriend the Taiwanese people and improve their negative impressions on the PRC. Since Taiwan's opposition parties leaders' visits to the mainland, the PRC has held conferences regarding Taiwan, emphasizing its determined efforts for domination in cross-strait interaction and for approval from the Taiwanese public. This shows that the PRC will take more diverse approaches in dealing with cross-strait issues. As there are close cross-strait interactions on all levels, should the PRC infiltrate and divide the Taiwanese society by manipulating a "quantitative change" to a "qualitative change," the policy direction and social sentiments of our nation will be affected considerably.

Summarily, the PRC's strategies against Taiwan have become diverse and flexible. Under organized planning, the PRC variously employs political pressure, economic magnetism, military and diplomatic intimidation, and social united fronts, which pose grave threats towards Taiwan's national unity and maintenance of security.

National Defense Report

## IV. Taiwan's Strategic Role in Asia-Pacific Security



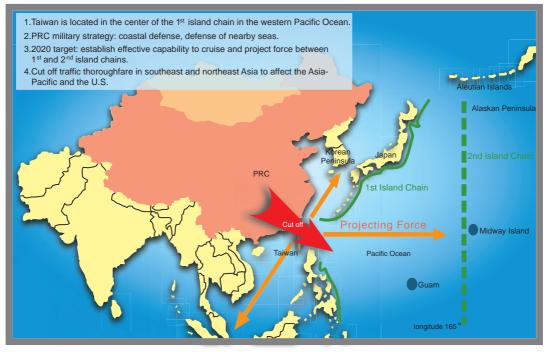
Taiwan, located in a major traffic thoroughfare in the Asia-Pacific, is also geographically close to the PRC. It has important geostrategic value due to it being in two major strategic water territories – the Taiwan Strait and the Bashi Channel – at the same time. Peace and stability over the Taiwan Strait affect the safety of western Pacific international routes and the future of Asia-Pacific economic

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development, making Taiwan an important fulcrum in Asia-Pacific security and stable developments. Also, Taiwan's experience in successful economic development and defense of democracy, freedom, and human rights are of common interest with democracies around the world. It is also an important tool for exercising indirect international and inter-strait leverage. These two important strategic values are an important foundation in Taiwan's positive role in Asia-Pacific security.

#### 1. The 1st Island Chain and Keys to Stability in the Taiwan Strait

Geographically, Taiwan forms a crescent-shaped strategic front in Asia, connecting northeast and Southeast Asia, making it the pivot point in the 1st Pacific island chain. To the PRC, this island chain can affect the PRC's southeastern coasts, making Taiwan a spring board for the PRC's naval expansion and to penetrate the first American defense in the 1st island chain into the 2nd one and the Pacific Ocean (Refer to Figure 1-3, 1st Island Chain pivot point and keys to stability in the Taiwan Strait). To American and Japanese interests, Taiwan also serves as a buffer for Japan's southern peripheral seas. This strategic position is convenient for force projection towards surrounding waters, and has a balancing function for the interaction of Western Pacific strategic interests between the U.S., Japan, and the PRC, making it a key leverage point in Asia-Pacific stability and development. This special oceanic geographical characteristic makes Taiwan a point where all traffic to and from North America and northeast and Southeast Asia must pass through. Therefore, every day there are



△ Figure 1-3 1<sup>st</sup> Island Chain pivot point and keys to stability in the Taiwan Strait



n 2005, after the first U.S.—Japanese "Security Consultative Committee 2—Plus—2 Conference," the U.S. and Japan announced that they will list maintenance of peace in the Taiwan Strait as a major strategic goal, with the intent to make pre—emptive preparation for possible conflicts in the Taiwan Strait, which indicates that peace in the Taiwan Strait has important implications for east Asian regional security.

as many as 800 to 900 commercial boats and aircraft passing through waters and airspace around Taiwan. Because Taiwan, Japan, and Korea all lack in natural resources, and tend to be export-oriented, they need shipping by sea to import oil, civilian goods, and industrial materials, and to export various industrial goods around the world. When conflicts ensue on these waters, it has severe consequences for Taiwan's national security

and Japan's and Korea's trade routes.

Because Taiwan is located in the center of the PRC's coastline, 3 of 4 major PRC trade routes go through south of the Taiwan Strait. Uninhibited travel on Taiwan's surrounding waters has significant influence on the PRC's economic and overseas trade. Militarily, Taiwan divides the PRC's coastal defense line in 2, which could serve as a key lockdown function against the PRC naval and aerial entries into the Pacific Ocean. In the past several decades, Taiwan's advantageous geographical position and strong defenses have effectively defended peace and stability in the Taiwan Strait, which not only constrained the PRC's oceanic-expansion intentions, but also provided important protection for the safety of international sea lines. In the future, Taiwan will continue to play an appropriate role and contribute toward Asia-Pacific peace and stability under this geostrategic framework.

#### 2. Mutual Defender of Democracy, Freedom, and Human Rights

Other than the aforementioned geostrategic values, Taiwan has achieved many years of economic development with an appreciation for democracy, freedom, and human rights. Taiwan not only shares common interests with democracies around the world, but also exerts indirect influence to change the PRC's authoritarian nature. Observing that the U.S., Japan, and various southeastern Asian countries are all establishing ties with the PRC, if cross-strait relations can be relaxed in the future, Taiwan is willing to engage in negotiations and actively build an interactive peace and stability framework under autonomous, democratic, peaceful, and equal terms. Because Taiwan has peacefully transformed into a democratic country, people's political beliefs, freedom of the press and speech have adequate protection. This experience sets a paradigm in the PRC's democratic transformation and is beneficial to its peaceful reforms.

Also, Taiwan's economic position is prominent. For example, Taiwan's information technology

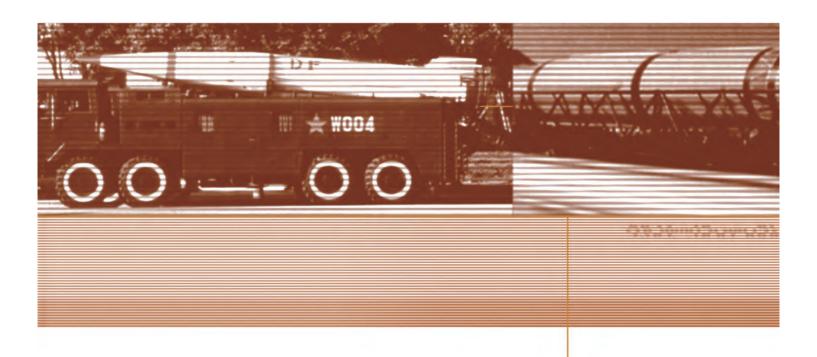
ne Evolving Secur

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Promote the establishment of a "crossstrait interactive peace and stability framework"

As our government undertakes security of national livelihood and development of societal prosperity, the reality of the close-knit interaction of cross-strait economy, trade, society and culture needs to be addressed in the face of cross-strait relations, being in a state of "hostility, stalemate and cold peace." The government shall hold fast to a stance of "goodwill without retreat, stronghold without hostility," and be proactive in promoting the establishment of a "cross-strait interactive peace and stability framework." Under this general policy, the MND has completed preliminary deliberation and plans on a military Confidence Building Measures (CBM), configuring military buffer zones and regulating a code of conduct in the Strait. It publicly announced these key undertakings in the 2004 National Defense Report. As we take a look into international cases and experience however, we see that the promotion of any confidence measures could only be built on a foundation of goodwill by the parties antagonistic to each other. Yet regardless of our numerous good-willed proposals, the PRC enacted the Anti-Secession Law so as to step up its program of targeted military buildup and exercises. This has become the greatest hindrance for both sides of the Strait to engage in peace negotiations and interactions.

industry has considerable leverage in the global supply chain. Many other traditional and high-tech industries are also world leaders. In other words, Taiwan's pursuit of democracy and economic development has received considerable attention from the international community. In the future, Taiwan will continue democratization, protection of human rights, and economic developments to defend mainstream values cherished by the international society, with the hope of making concrete contributions regionally and globally.



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- I. A Force Projection Military Strategy
- II. PRC's Defense Budget and Weapon Development
- III. PRC's Military Capability Buildup and Exercises

# PRC's Military Developm

The PRC's recent booming economy has provided abundant resources for its military modernization efforts. In response to future warfare requirements, the PRC focused its military modernization efforts on the areas of information technology, aerospace and Second Artillery (ballistic missile components). Supplementary efforts also have been conducted on the enhancements of warfighting capabilities for traditional army, naval, and air force. The PRC is gradually forming its capabilities of conducting modern warfare and providing force projection into surrounding regions and its rising military strength will become its most effective policy instrument to support its pursuit of becoming a regional power. The impact of such developments not only compromises the military balance across the Taiwan Strait, it also imposes potential impacts on future peace and stability in the Asia-Pacific region; the follow-on developments deserve much attention.

I. A Force Projection Military Strategy

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With its rising political and economic power, the PRC's military strategy needs to evolve accordingly, so as to satisfy the increasing demand for more dominance into various fields. In other words, the PRC hopes its military power can facilitate the accomplishment of its strategic goals, be extended beyond traditional territorial boundaries and projected into regions of national interests. A report titled "Military Power of the People's Republic of China, 2006" by the U.S. Department of Defense analyzed the recent military buildup of the PRC revealing its intention to extend its military control capabilities into the 2<sup>nd</sup> island chain and further into the western Pacific. Overall, the military strategy of the PRC clearly demonstrated a "force projection" model in pursuit of its "national interests" described above.

#### 1. Incremental Adjustments in Military Strategy

Since the founding of the PRC, "active defense" has always been the core concept in its military strategy. Meanwhile, the PLA has been giving "active defense" different interpretations based on changes in domestic and international environments during different time periods. For example, the People's Liberation Army Navy (PLAN) continues to expand its battle space and depth of defense for littoral defense operations. The People's Liberation Army Air Force (PLAAF) is gradually transforming from a domestic air defense role to a force capable of conducting both defensive and offensive missions. Such changes have distorted the defensive nature emphasized in the "active defense" strategy. Also, the PLA has achieved significant progresses in areas such as information technology, aerospace, and Second Artillery, etc. The introduction of such modern technologies and tactics has enabled the PLA to engage in electronic-magnetic and space warfares virtually eliminating any physical restriction imposed by traditional territorial boundaries. These transformations have equipped the PLA with offensive combat capabilities. Based on its increasing regional influence and military preparations against Taiwan, its active defense concept has been adjusted to a more mutual offensive and defensive context with more emphasis on offensive actions. This adjustment in concept provides a concrete assurance for its increasingly expanding national interests.

#### 2. Expanding the range of Air and Naval Fleet Activities

With the increasing PLA naval and air power, the range of PLA air and naval fleet activities is continuously expanding. In the past, the PLA's fleets rarely moved across the central line of the Taiwan Strait or intruded in the exclusive economic zones of surrounding nations. Fundamental changes occurred after 1996. For example, in 1998, the PLAAF had over 400 sorties of fighters patrolling



△ Figure 2-1 Statistics of the PLA's fighters activities west of the Taiwan Strait central line from 1998 to 2005

air space west of the Taiwan Strait central line. In 2005, such activities increased to 1,700 (Refer to Figure 2-1, Statistics of the PLA's fighters activities west of the Taiwan Strait central line from 1998 to 2005). Also, the PRC's intelligence gathering vessels continue to operate around the Taiwan waters. The PRC's scientific research and intelligence gathering vessels have been spotted more than 20 times around the Taiwan Strait in the last three years, with several intrusions into Taiwan's exclusive economic zone. The frequent appearance of the PRC's ships around the Taiwan' waters demonstrates they are not only gathering hydrological and meteorological information of the Taiwan area but also testing Taiwan's military response time to their maneuvers as a reference if it becomes necessary to take military actions against Taiwan.

In the past two to three years, the PRC frequently dispatched hydrographic vessels into Japan's exclusive economic zones to conduct marine research. This was sighted as many as 30 times in 2003. In November, 2003, a PLA Ming-class submarine was detected in Japan's Osumi Strait. In November, 2004, a PLAN Han-class nuclear submarine was spotted for the first time within Japan's territorial sea. These indications showed that the PRC's naval activities have reached the 2<sup>nd</sup> island chain. Also, Japan fighters intercepted the PLA's attempts to enter Japanese airspace for as many as 30 times from April to September of 2005. It is estimated that the PRC's fleets are actively gathering information in the East China Sea, where it is trying to effectively take command of the sea and the air in time of war and obstruct prompt intervention from the U.S. military forces and Japan's Self Defense Forces when a crisis situation escalates in the Taiwan Strait.

#### 3. Active Promotion of Military Diplomacy

The PRC comprehends the flexibility and diverse capabilities which military diplomacy can achieve and therefore it is promoting military diplomacy to secure maximum leverage which political diplomacy alone can not accomplish.

#### (1) Analyzed Primary Objectives of the PRC's Promotion of Military Diplomacy

a. To strengthen interchange with major world powers in terms of strategic cooperation

The PRC seeks to increase contact, cooperation and interchange with the U.S., the EU, Japan and Russia, and enhance friendly interactions through strategic security dialogue to set a positive foundation for opening other strategic cooperatives. Furthermore, it also attempts to diffuse concerns of the "China threat" among international communities through visits and cooperation amongst military personnel.

b. To execute "Good Neighbor Policy" for regional stabilization

Facing south Asian nuclear arms races and the North Korean nuclear crisis, the PRC temporarily set aside its sovereignty disputes engaging actively in negotiations with the neighboring countries. The PRC is conducting unconventional security cooperation with India, Pakistan, and member states of the Shanghai Cooperation Organization (SCO). It also participated in six-party talks to resolve the North Korean nuclear standoff, increased its dialogue and cooperation in ASEAN regional forums, and signed the "Sino-Vietnamese northern bay area joint naval patrol agreement" to create a positive international environment for the PRC's peaceful development.

c. To acquire new weapon and increase warfighting capabilities

To accelerate the PLA's current military modernization, the PRC is actively seeking new weapons and platforms from the U.S., Europe, Russia and Israel. Multiple joint exercises and military observations have been conducted between the PRC and foreign militaries with the goals of increasing combat efficiency and decreasing gaps in strategic concepts with modern nations. Topics include anti-terrorism, joint naval search and rescue, joint land-air operations, amphibious operations, and offensive operations in mountainous terrain. (Refer to Appendix 2-1, Joint Military Exercises and Military Observations between the PLA and Foreign Militaries from 2004 to 2005)

#### (2) 2005 the PRC's Major Activities in Military Diplomacy

a. Visits from other countries

More than 80 delegations led by the heads of foreign militaries and high-level political figures from over 60 countries visited the PRC in 2005. Among them, the U.S. was the most frequent country for 6 times, followed by Italy (5 times), Austria (4 times), Thailand, Cambodia, Russia (3 times each), Pakistan, Turkey, Germany, Burma, Congo, Nauru, Malaysia, Vietnam, Vanuatu, Sri Lanka, Belarus, Cuba, Egypt, and New Zealand (twice each). The other delegations (total more than 40) were sent from other countries only once each. The most important delegation was led by U.S. Sec-

RC's Military Developme



retary of Defense Donald Rumsfeld when he first visited the PRC after taking his office.

#### b. Port visit exchanges with foreign navies

PLAN's military interchanges with foreign countries in 2005 were characterized with invitations and receptions. There was only one official foreign visit by its navy to India, Pakistan, and Thailand. In the same year, U.S., British, French, Malaysian, Chilean, and Australian naval vessels visited Qingdao, Shanghai, and Hong Kong. PLAN has also engaged in combined naval search and rescue exercises with foreign countries such as Britain, France, Australia, Pakistan, Indian, and Thailand (some held during visits of other countries' military fleets and the others held during its overseas travel stops) as well as promoting international military cooperation.

#### c. Arms exports

Recent weapons exports by the PRC include fighters, frigates, surface-to-air (SAM) missiles, tank repair parts, shoulder-fired anti-air missiles, anti-tank missiles, and technical electronic surveil-lance and reconnaissance equipment to North Korea, Burma, Pakistan, Sudan, Zimbabwe, Cambodia, India, Bangladesh, and Malaysia. The PRC also signed memorandums of cooperation with the EU on topics such as space exploitation, hydrogen energy, nuclear fusion, and biotechnology, all of which deserve attention.

#### d. Weapons acquisition

The PRC imported Russian Su-30MK2 fighters, IL-76 strategic airlift aircraft, IL-78 refueling tankers, and S-300 SAM missiles to fortify its overall air combat capabilities. The acquisition of eight Kilo-class submarines and two Sovremennyy-class destroyers will occur by the end of 2006. The PRC also purchased large transport ships, scientific investigation ships, Raketnyy Kreyser class missile cruisers, and electronic equipment from South Korea, Norway, Ukraine, and France. They also conducted R&D and testing on Z-10 helicopters, quartz melting, laser glass optical materials, new fighters, and phased array radars with Italy, France, Canada, and Russia. The most noteworthy of such activities is joint development of the 5th generation Russia fighters by the PRC, Russian, and India.

#### e. Peacekeeping missions

Currently, over 1,300 PLA's military personnel are involved in ten UN peacekeeping missions. In the past, the PRC tended to participate in peacekeeping missions in Asia, but recent involvement includes dispatching peacekeeping troops to Africa due to the economic potentials of oil and minerals in the region. Also, the PRC is aggressively taking part in international peacekeeping missions to expand its weight and influence by assisting and collaborating with African and Latin American nations.





#### National Defense Report

#### **II. PRC's Defense Budget and Weapon Development**



In the last decade, the PRC's growing economic strength allowed it to devote more resources to research and manufacturing its own weapons or import new weapons and platforms from foreign countries. These developments have become potential threats to the security across the Taiwan Strait and in the Asia-Pacific region. Therefore, understanding the PRC's defense budget allocation and its advanced weapon R&D is crucial in predicting the PRC's future military developments and its full military potential. This can also serve as an important reference when analyzing the PRC's military threats against Taiwan.

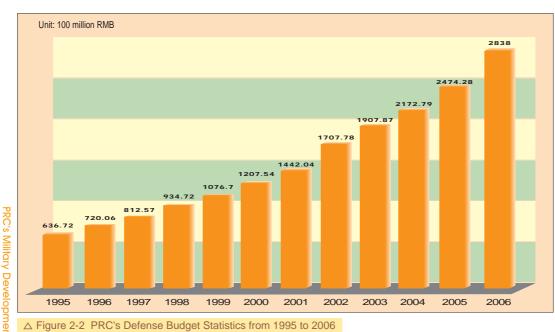
#### 1. Defense Budgeting

In March, 2006, the PRC announced its official defense budget as RMB 283.8 billion (approximately US\$ 35.1 billion), a 14.7% growth from that of 2005. It is important to note that a large number of hidden budget is not included in the official defense budget figures.

#### (1) Budget Summary

The PRC's 2006 defense budget (RMB 283.8 billion) accounted for 1.43% of its GDP, or 7.4% of its overall government expenditures. (Refer to Figure 2-2, PRC's Defense Budget Statistics from 1995 to 2006)

#### (2) Budget Structure



△ Figure 2-2 PRC's Defense Budget Statistics from 1995 to 2006

The PRC's official defense budget is separated into three parts, including personnel expenditure (i.e. personnel maintenance, primarily for salary, food, uniforms, etc for officer, solder, and employees), operations and maintenance (i.e. operational maintenance, primarily for troop training, construction facility maintenance, and daily consumables), and equipment (i.e. military investments, primarily for the scientific research, testing, procurement, maintenance, transport, and storage of weaponry and equipment), each occupying approximately one-third of the overall budget.

#### (3) Hidden Budgets

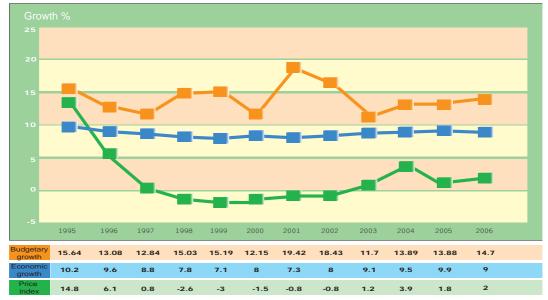
The official defense budget, as made public by the PRC government, accounts for only part of its overall defense spending. Careful examination of previous actual military spending shows that certain outlays were channeled through some 10 other government organizations, including the Commission of Science, Technology, and Industry for National Defense (COSTIND) and Nuclear Engineering Department. Hidden expenses are also appropriated under non-military expenditures, such as outlays for cultural, educational programs and scientific research. Payments for military procurement are sometimes itemized through "central government appropriations," "defense industry earnings" and "arms sales proceeds." Furthermore, these numbers did not include the Shenzhou manned space program, nuclear weapon storage, military police, Second Artillery Forces budgets, defense industry subsidies, and military research...etc. Therefore, it is expected that the PRC's actual defense budget might have exceeded US\$ 90 billion and be two to three times of the official figure, making the PRC the third largest defense expenditures country in the world (the first two are the U.S. and Russia).

#### (4) Future Trends

The 2005 financial report by the PRC State Council indicated its budgetary deficit along with internal and external debts together have reached US\$ 300 billion. However, with its US\$ 818.9 billion of foreign reserves in 2005 and a sustainable high level of economic growth, it is expected there will be no drastic changes in the PRC's financial condition. The 2005 defense budget of the PRC is anticipated to continue its 2-digit percentage growth as in previous years. In the short and medium terms, this trend is not likely to change.

After the Cold War, global-scale political and military confrontations are no longer expected. Military expenditures of individual nations are expected to be maintained at the current level or even decreased, except for increased U.S. military expenditures in the Global War on Terror. The PRC's rapidly increasing defense budgets naturally arouse regional and international concerns. Facing these concerns, the PRC insists that these defense budget increases be primarily for improving the living conditions of its servicemen and offsetting the reductions in purchasing power due to inflation. Since the PRC has no apparent foreign adversaries and does not encounter direct and imminent military threats, its faster rate of defense budget spending over its economic growth (Refer to Figure





△ Figure 2-3 PRC's Annual Defense Budgetary and Economic Growth Compared to Price Indices

2-3, PRC's Annual Defense Budgetary and Economic Growth Compared to Price Indices) cannot resolve international concerns at its non-transparent and rapidly expanding defense budget. In the foreseeable future, with the trend of continuous economic growth, the PRC's military can acquire more resources to implement military modernization, RMA reform and transformational military developments.

#### 2. Major Weapon R&D

To respond to future warfare requirements, the PRC is recently and actively involved in high-tech research, believing that high-tech weapons can change the patterns of war and win war it swiftly. Current important PRC weapon research projects are summarized below:

#### (1) Information Technology

Recently, the PRC has been actively developing its information warfare capabilities. In addition to applying information warfare theories to national, political, and military strategies, related tactics, techniques and procedures are also applied to domains of intelligence, electronic countermeasure, computer countermeasure, and psychological warfare, with the hope of securing electronic dominance at both the strategic and tactical levels. To prevent enemy sabotage and espionage, the PRC is actively seeking to establish network protection and information system defense capabilities, hoping to build up safe and secure information networks. Through acquisition, replication and autonomous research, the PRC is developing related hardware and software on both offensive and defensive information warfare measures to improve its hard kill and soft kill capabilities. The PRC currently has

only one electronic reconnaissance satellite. In the future, through acquiring advanced European and U.S. radar technologies, the PRC can improve its research and development capacities in fields of electronic and optical surveillance, interception, jamming and anti-jamming and consequently enhancing its electronic warfare capabilities.

#### (2) Aerospace

To secure its military command and control communications, improve precision navigation for both sealift and airlift vehicles, and conduct all-weather surveillance and reconnaissance capabilities, the PRC continues to pursue research and development in aerospace technology to upgrade its command and control communications and establish precision image databases. The PRC currently has over twenty satellites in orbit for positioning, navigation, reconnaissance, scientific research, and meteorology. On October 15, 2003, the PRC launched Shenzhou No. 5, starting its first manned space flight mission. On October 12, 2005, it launched Shenzhou No. 6, its second manned space flight mission. These two flights secured various technology data that will be valuable towards future developments of aerospace military power and space surveillance capabilities. Also, the PRC is actively researching various military satellites to increase its early warning, command and control, battlefield surveillance, fleet navigation, and missile control capabilities. In the near term, the PRC's aerospace research focuses on the integration of satellite surveillance and reconnaissance, precision navigation, and target imaging to increase its enemy monitoring and precision strike capabilities. The PRC is developing its Beidou satellites and participating in the EU Galileo project. The initial operation of the Galileo system may provide peaceful applications, but the PRC can use such applications to increase the precision of its remote control weapons and fleet navigation positioning capabilities, which will be detrimental to Taiwan's defense operations.

#### (3) Second Artillery

The PRC's new ballistic missiles R&D is targeted toward "solidify, miniaturize, and mobilize." Through integration with advanced satellite guidance systems, the precision of the PRC's overall striking capabilities can be greatly enhanced. The PRC is actively researching precision strike technologies such as land-based cruise missiles, satellite navigation and image matching guidance with the intent of using short and medium range ballistic and cruise missiles as its nonlinear and asymmetric kill weapons. It is important to note that the PRC's existing medium and long range and intercontinental strategic missile ranges can reach all major countries around the world, making them important tools for nuclear intimidation against other countries.

#### (4) Air Force

The PRC's air force buildup is focused on the following three areas:

a. Modifying in-service military aircraft

The PRC continues to mass-produce Sukhoi 27 (JT-11) and JT-10 fighters, and reengineer



#### b. Replicating foreign anti-air weapons

The PRC continues to acquire and is actively engaged in replicating the Russian S-300 anti-air missiles with range up to 200 km. The PRC is also replicating the Swiss-made anti-air artillery systems. Complemented by self-propelled anti-air artilleries, the PRC is using Hongying, Qienwei, and Feinu man-portable anti-air missiles to enhance its frontal engagement capabilities in its air defense system, providing its troops with real time anti-air supporting firepower.

#### c. Developing new fighters

Xiaolong (a.k.a. FC-1) fighter was produced under the joint venture between the PRC and Pakistan. Agreements were signed in 1999, and there have been 4 test flights from 2003 to 2006. It is officially named the Xiaolong fighter, which Pakistan named JF-17. Joint production of 400 planes started in the latter half of 2005 (exporting 150 to Pakistan). The first four will be tested by December, 2006 with a target annual production rate of 24 in 2008. The design of the plane is to provide mobility at medium and low altitudes, beyond visual range strike, short-range dog fight, precision air-to-surface strike, and anti-ship capabilities for air superiority and close air support missions.

#### (5) Navy

The PRC's naval weapon research focused on the following three areas:

a. Surface platform research and development

On the naval surface warfare platforms, the PRC is accelerating its research and manufacture of new DDG, DEG, and acquiring the Russian Sovremennyy-class destroyers. For shipborne combat systems, the PRC is actively developing phased array radar-equipped combat systems to magnify its area air defense capabilities. Its new surface combat ships have stealth capabilities, which can greatly increase its battle space survivability. Also, the PRC is currently accelerating research on large tank-landing ships to enhance its amphibious operations capabilities.

b. Submarine research and development

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The PRC is currently accelerating research on new nuclear submarines and conventional submarines, and purchased eight Russian Kilo-class submarines to serve as its new generation of submarines with superior underwater combat capabilities.

#### c. Weapon modifications

To enhance naval surface combat capability, the PRC is researching on their Yingji series of SSMs and Haihongqi series of SAMs, and is continuously engaged in the research and production of supersonic and submarine-launched anti-ship missiles to enhance its long range anti-ship and air defense capabilities. Also, the PLAN acquired the improved Russian SS-N-22 Sunburn supersonic anti-ship missiles, and SS-N-27 Klub submarine-launched anti-ship missiles and is reengineering its land-based cruise missiles into sea-based cruise missiles to increase long-range precision and anti-carrier strike capabilities.

#### (6) Ground Force

The PRC's land-based weapon R&D is focused on the following three areas:

a. New armored vehicles

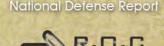
The PRC is continuing research and mass-producing T-96 and T-99 main battle tanks and accelerating the upgrades and deployments to increase its firepower and armor-penetration capabilities.

b. New artillery

The PRC is researching new 122 to 155-mm self-propelled artillery, howitzers, and projectile range extension programs. In addition to increasing firepower, some equipment will be further modified for air-drop and airborne operations.

c. Army helicopters

The PRC is accelerating research on new attack helicopters, and continuing its imports of Russian MIG 17 transport helicopters to improve the firepower and long range rapid deployment capabilities of its ground forces.



#### III. PRC's Military Capability Buildup and Exercises



The PRC tried "harsh rhetoric and saber rattling," "harsh rhetoric and preparation to fight" and changed to adopt "cultural united front, military pressure" as its current approach to resolve its so called "Taiwan issue." The use of force has never been ruled out and the PRC's current policies toward Taiwan are mostly similar to, but more flexible than, those adopted by Deng Xiaoping and Jiang Zemin. Under the guidance of "peaceful unification" and "one country, two systems," the PRC is enhancing its propaganda of "placing hope on Taiwan people" as well as emphasizing on "winning



local wars under advanced information technology conditions" in order to force Taiwan's surrender through military intimidation. Besides continued enhancement of its combat capabilities, the PRC intends to use measures other than force for removing possible obstacles to its invasion of Taiwan if necessary in the future. This indicates the increasing delicacy and comprehensiveness behind the PRC's strategy against Taiwan. The PRC's war preparations, exercises and combat readiness efforts are summarized as follows:

#### 1. Strategic Force

The PLA's strategic intent is to build upon its strategic guidance of "winning a campaign in remote areas quickly, winning the first campaign decisively." It is continuously enhancing its naval, air, Second Artillery, and joint operations capabilities. The PLA is also extending traditional ground warfare to fields of underwater, surface, aerial, space, electromagnetic, and network warfares. Its intention is to obtain superiority in the "six dimensions" with an emphasis on using the Second Artillery Force as its strategic capability. Developments are summarized below:

#### (1) Strike range covering all major countries

The PLA's new ballistic missiles have integrated with advanced satellite guidance systems which can greatly increase their overall precision strike capabilities. The PLA is deploying traditional and nuclear ballistic missiles with a mix of short, medium, long, and intercontinental strike ranges. The PLA's nuclear weapons can reach all major countries around the world. (Refer to Figure 2-4, PLA's land-based nuclear weapon strike range)

#### (2) Multi-purpose strike capabilities

Through years of intelligence gathering, the PLA has acquired sufficient intelligence of Taiwan's important targets and facilities. Its conventional and nuclear ballistic missiles already deployed can attack Taiwan's major airports, sea ports, radar stations, and major infrastructures. The PLA's current strategic long-range and intercontinental counterforces are used primarily for nuclear deterrence and counterstrike. Currently, there are nearly 190 strategic missiles placed in the inland region for strategic (nuclear) counter-strike making up a preliminary nuclear deterrence system.

#### 2. PRC's Military Capabilities

The PLA continued reengineering its force structure in 2005. As of the end of 2005, the PLA had completed systematic organization adjustment and reforms and streamlined various agencies and combat units with current strength totaled 2.3 million after the cut of 170,000 cadres positions. In 2006, the PLA will continue its force restructuring efforts and keep reforming its manning system. Also, the PLA is actively constructing contingency forces by employing Second Artillery, first line air forces along the coast, new-generation surface combatants from the East and South Sea naval

RC's Military Development



△ Figure 2-4 PLA's land-based nuclear weapons strike range

fleets, and ground forces from the seven major Military Regions. Recently put emphasis on the use of both military and non-military means, and exceed battlefields restrictions, and strive for victories when faced with a superior adversary. This use of a supra-conventional war model has generated a certain of impacts on the operational concept of the PRC's armed forces. In the future, the PRC may also use certain "assassin's mace" weapons for precision strikes, and sabotage Taiwan's major political, economic, and military infrastructures through "acupuncture warfare" and various other asymmetric tactics, techniques and procedures with hope of securing the greatest political benefits through the least costs. Relevant capabilities include:

#### (1) Intelligence Surveillance and Reconnaissance Capabilities

- a. Space: Currently, relevant units within the PLA General Staff Department are in charge of the operations of reconnaissance, weather, communication, and maritime monitoring satellites. These satellites are capable of performing long term reconnaissance of the surrounding areas of Taiwan, Penghu, Kinmen, and Matzu including land, atmosphere, ocean, and electronic signals. In the future, if integrated with its surface and air target information gathered from air forces and fleets, the PRC will be able to effectively monitoring Taiwan's military deployments.
- b. Air: Various electronic warfare aircraft, reconnaissance planes and early warning aircraft can be employed in the Straits or Taiwan's surrounding water and airspace to reconnoiter Taiwan's military deployments and activities during peacetime or wartime.
- c. Sea: The PRC currently possesses 110 to 120 information gathering ships, oceanographic survey ships, hydrographic vessels, and modified information gathering fishing boats. These vessels are capable of performing electronic interception, hydrological environment research, and information gathering activities around the surrounding waters of Taiwan.
- d. Ground: The PLA's General Staff Department and Military Region electronic reconnaissance troops can identify the types and hull numbers of ships from Taiwan or other countries traveling over the Taiwan Strait. The PRC can also use long, short, and ultra-short wave, ultra high frequency, microwave, electronic facilities, and satellite communications to perform comprehensive espionage on Taiwan's telecommunications and radar stations.

#### (2) Aerospace Combat Capabilities

To enhance security in military command and control communication, precision navigation for naval and aerial transportations and all-weather reconnaissance capabilities, the PLA continues to pursue aerospace research, hoping to enhance communications command and scientific research capabilities, and establish precision imagery data. Reconnaissance satellites supplemented by 3-D precision navigation and target imagery data will greatly increase the striking precision of the PLA's cruise missiles.

#### (3) Information Warfare Capabilities

The PRC recognizes the importance of battlespace ISR, and is actively enhancing information warfare capabilities for its troops to accurately moniter battlespace conditions and provide situational awareness. Currently, the PRC's information warfare methods include computer viruses, hacking, and electromagnetic pulse assaults. Possible tactics include Trojan horses, worms, phishing, hoaxes, and spyware. The PRC may also use electromagnetic pulse weapons to directly paralyze Taiwan's C4ISR systems and completely acquire electronic dominance over the Taiwan Strait.

#### (4) Second Artillery Combat Capabilities

a. With an overall strength of over 130,000 personnel, the Second Artillery possesses over 100

RC's Military Developme



ballistic missiles sites. There are over 970 demployed strategic and tactical ballistic missiles. Medium, long range and intercontinental ballistic missiles are strategic leverages for the PRC to apply nuclear intimidation against major countries. Short range ballistic missiles can cover the entire island of Taiwan. After adding satellite navigation systems and various submunitions, it can increase the precision and casualty radius of its missiles posing a serious threat against Taiwan.

b. In tactical (conventional) strikes, the PLA is forming new missile brigades in its coastal areas directly facing Taiwan and employing short and medium range conventional ballistic missiles, including Dongfong-11A and 15A capable of striking Taiwan's heartland. If launch sites are deployed in shelters on the 100 to 300 km inland areas from the border, the PRC can use conventional missiles to attack all major strategic and tactical targets of neighboring countries within its missile strike coverage. Also, the PRC continue to reengineer and test launch its various tactical and strategic missiles in 2005. Compared with 2004, the number of test launches increased,

lectromagnetic pulse weapons; when nuclear weapons detonate, collision between high gamma radiation and air particle will produce electron radiation forming strong electromagnetic fields. The effects of which are short (less than 1 second), but computers and electronic equipments affected by the field will be hit with highenergy electrons resulting in destructive results such as lost of data due to instant overload on the integrated circuits and degaussing computer memories. This may cause C4ISR systems and high-tech weapons highly relied on computers to become paralyzed. These effects, however, will not cause casualties on human or animals.

C<sup>4</sup>ISR systems: refers to command (issuing orders to participating agencies), control (task group operations and firepower coordination), communications (conveying information through wired, wireless, optical fibers, or satellites relays), information (hardware required for automated networks), intelligence (early warning and battlefield activities), reconnaissance (active search to detect enemy activities), and surveillance (passive monitoring of enemy activities).

indicating the PRC can adjust the speed of missile production and annual production rate at will under its ample defense budget, the determination and policy to accelerate missile developments .(Refer to Figure 2-5, Strike Coverage of PLA's Short and Medium Range Missiles)

c. Serious threats against Taiwan materialize if the PLA complements cruise missiles with regular missiles forming multi-altitude multi-function missile strikes against Taiwan's airports, ports, radar stations, and civilian facilities. Currently, live firing rang (e.g. airports and power plants) have been sighted within the Gansu and Xinjiang provinces. This indicates that the PRC is setting up simulated strike targets corresponding to actual intended targets for precision and warhead damage capability testing. This will provide physical verification and battle assessment for the troops.

△ Figure 2-5 Strike Coverage of PLA's Short and Medium Range Missiles

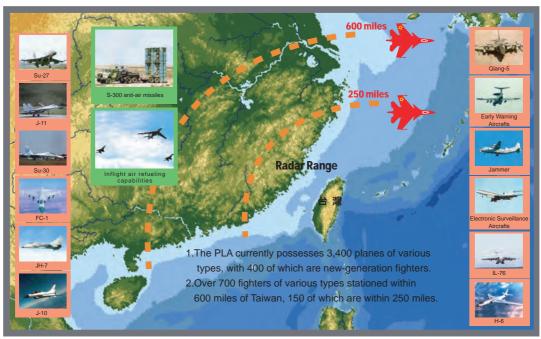
#### (5) Air Combat Capabilities

a. The overall air force (including paratroops) has a strength of over 380,000 personnel, and over 3,400 aircraft of various types. Over 700 fighters of various types are deployed within 1,080 km (600 miles) from Taiwan with 150 of them only 450km (250 miles) away from Taiwan. To enhance the overall air defense capability, the PLA has recently accelerated its air force upgrade schedules and will continue to upgrade its new generation fighters. The war preparation efforts accelerated both in terms of quality and quantity and mostly were focused on southeastern coastal areas and the South China Sea based on the principle of deployments of "nimble front and robust rear." The goal is to enhance air dominance over the Taiwan Strait and the South China Sea . Over 400 new-generation fighters are equipped with AA-12 and PL-12 medium/long range air-to-air missiles capable of performing regional precision air strikes (Refer to Figure 2-6, PLA's Aerial Threats against Taiwan).

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The PLA also enhanced its alternative battlefield coordinated operations and command and control capabilities in 2005. In addition to verifying the depot level integrated logistic support and contingency support capacities, such actions not only enhanced military deployments in coastal regions directly facing Taiwan but also increased the military intimidation against Taiwan.

- b. Air Defense Operation Capability: Through frequent exercise rotations in coastal regions directly facing Taiwan, the PLA's air defense forces have formed a tight multi-layered fighters, missiles and artillery fire networks with the Jian fighters in the region. Current training focuses on combat command, maneuver operations, and combat support. The PLA air defense forces are aggressively seeking foreign air defense combat experiences to improve the overall air defense in the southeastern seas. This also poses a major threat against Taiwan's combat air patrol activities over the Taiwan Strait.
- c. Contingency operational capabilities: The PLA's aerial and naval contingency response maneuver force currently includes air force divisions, independent groups, radar battalions, missile divisions, missile brigades, missile groups, air assault divisions, and logistics depots. They are supported by over 800 bombers of various types, and consist of over 40,000 personnel.
- d. Early warning capabilities: The PRC's indigenous aerial command and communication aircraft and early warning aircraft entered service in the air force in 2006, and are currently deployed in the southeastern seas. They are undergoing active testing, with the hope of increasing overall aerial command, control, and target acquisition capabilities through coordination between aircraft of



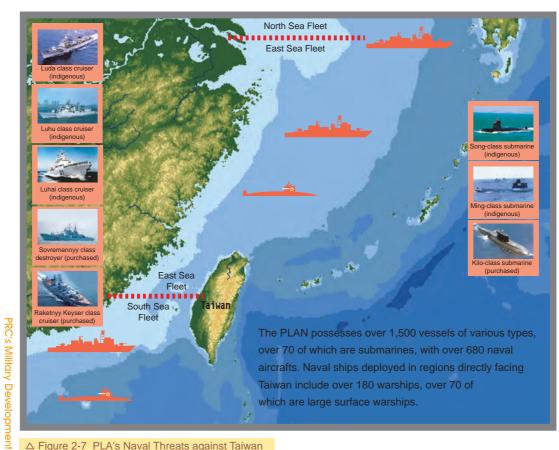
△ Figure 2-6 PLA's Aerial Threats against Taiwan



different altitudes.

#### (6) Naval Combat Capabilities

a. With an overall strength of near 280,000 personnel (including naval aviation and marine corps), the PLAN possesses over 1,500 ships of various types in service, with over 680 naval aircraft of various types (approximately 35,000 personnel). Among them, over 180 warships of various types are deployed in regions directly facing Taiwan. For surface combat capabilities, the PLA possesses over 70 large surface warships, accompanied by naval aviation forces, and is capable of conducting joint air-and-sea operations, and performing anti-surface, assault, and long-term maritime blockades against Taiwan. Furthermore, some of the PLAN's next-generation warships are designed with stealth and silence features. When equipped with new anti-air and anti-surface missiles, the survivability of those warships can be improved as well as its sea dominance capabilities increased dramatically. Over 130 of the remaining warships (over 760) carry anti-surface missiles with assault, blockade, and amphibious combat support capabilities (Refer to Figure 2-7, PLA's Naval Threats against Taiwan). If the PRC continues to increase its defense budget, its combat capabilities over distant high seas will be enhanced accordingly.



△ Figure 2-7 PLA's Naval Threats against Taiwan

- b. Underwater warfighting capabilities: The PRC has the world's 3<sup>rd</sup> largest (over 70 of various types) submarine fleet with over 40 submarines equipped with good functionality to meet future environments. The Ming, Kilo and Song class conventional submarines and other nuclear ones (strategic weapons) will be primary forces for invading Taiwan and countering foreign adversaries. These submarines are capable of performing underwater blockades (which only requires 16 submarines for complete blockades against Taiwan), underwater assaults, channel blockade, mining, infiltration, and extended range nuclear intimidations. There are currently over 50,000 underwater mines of various types and most of the warships and fishing boats (after minor modification) can be used to lay mines against major ports and maritime routes around Taiwan.
- c. Contingency operational capabilities: PLAN's contingency forces currently consist of two marine corps brigades, over 140 vessels of various types and employ over 28,000 personnel. The PRC believes the most possible areas of military conflicts will be the East and South Sea. Therefore, PLAN's contingency forces are composed primarily from the East and South Sea Fleets. The central East China Sea Fleet also provides support for operations in the South and North China Seas.
- d. There are over 16,000 fishing boats (over 80 tons) capable of conducting unconventional landing operations home ported within the three provinces of Jiangsu, Zhejiang and Fujian directly facing Taiwan. They can carry approximately 800,000 light infantry soldiers if each carries 50 personnel. Besides those needs for general overseas and littoral shipping, over 1,300 commercial ships of various types stationed in the coastal areas, 800 of them can be commanded to carry five to seven infantry divisions each time. However, they require aerial and naval superiority, secured beachheads and fully operational ports in order to perform administrative disembarkation.

#### (7) Ground Combat Capabilities

a. The People's Liberation Army (PLA) consists of nearly 1.3 million personnel. There are 7 major Military Regions, and 18 group armies. Among them, the area directly facing Taiwan is deployed with a group army consisting of over 60,000 personnel. The 7 major Military Regions consist of Nanjing, Guangzhou, Jinan, Beijing, Shenyang, Lanzhou, and Chengdu. The Military Regions are separated into 6 major zones according to their directions of operation. The southeastern zone, including Nanjing and Guangzhou Military Regions, is tasked with the invasion of Taiwan and "defending the southern borders." The northeastern zone, mainly consisting of the Shenyang Military Region, is held responsible for defending the borders with Russia and the Korean Peninsula. The southwestern zone, mainly consisting of the Chengdu Military Region, is held responsible for defending borders with India, Burma, and Vietnam. The northwestern zone is defended by the Lanzhou Military Region; its responsibilities include defending against countries in central Asia and dealing with anti-terrorism along the border. The capital zone is defended by the Beijing Military Region with the main responsibility of "defending the capital." The Jinan Military Region acts as a



strategic reserve and is also tasked to defend the capital.

b. Ground force capabilities: The most significant restructuring of the PLA's ground forces in 2005 was the reassignment of professional military branch forces under the Military Regions to the group armies. Further enhancements were made to the formation of technical branches such as army aviation, electronic defense and special forces. This restructuring increased the proportion of professional military branch forces in the group armies, enhanced combined weapons systems operations among various units, increased mobility and flexibility, and enhanced the combined weapons systems operations among the troops. The southeastern coastal military regions are equipped with new amphibious tanks, amphibious infantry armored transport vehicles, and amphibious infantry assault vehicles. These enhancements increased landing capabilities and provided amphibious operations experiences to the troops. The PLA has also amended the wartime commandeering regulations, assigning commercial vessels to carry artillery and air defense forces to enhance air defense and landing assault capabilities in unconventional landing operations.

#### (8) Rapid Reaction Force

- a. PLAAF: The air force and naval aviation rapid reaction force includes aviation divisions, independent groups are equipped with over 800 various fighters and bombers, which can join combat operations immediately.
- b. PLAN: The PLAN continues to incorporate its support bases and placed them under direct operation and training control by each fleet command. Primary combat forces from the East Sea fleets in the Shanghai and Zhoushan bases or from the South Sea fleets in the Guangzhou bases can reach any destination for direct combat support within three days.
- c. Ground Force: Current electronic countermeasure troops can be used for electronic jamming and offensive operations against Taiwan. Also, each Military Region possesses contingency response forces without battlefield experience, which can reach Nanjing and Guangzhou within one to three days and report for combat duty through aerial transport and army aviation support.

#### (9) Joint Operation Capabilities

- a. In the past few years, the PLA has aggressively made breakthroughs in satellites, communications and information technologies with significant improvements in command, control and communication capabilities. The PLA continues to incorporate joint operations concepts at all levels of training, and holds amphibious landing training in Nanjing, Guangzhou and Jinan Military Regions. Its aim is to enhance the PLA's C<sup>4</sup>I mechanism for joint operations to verify command and operational capabilities required during amphibious landing operations.
- b. Recently, joint exercise training grounds are proliferating in the PLA's Military Regions, providing all troops with joint warfighting and joint strike training among different armed forces branches. The purpose is to verify their joint warfighting personnel, firepower, and overall strike

capabilities. Military training reforms are primarily guided by combat missions, through integration with actual combat requirements and executed along the axis of training exchanges among military branches. Hence, the enhanced joint warfighting mechanisms.

c. In the past, prominent positions in the PRC military were held by PLA army generals. Now, PLAN, PLAAF, and Second Artillery commanders are members of the Central Military Council. Navy and Air Force generals are also members in the General Staff Headquarters indicating that the PLA's military is gradually implementing a joint command organization through the command hierarchy to effectively enhance coordinated joint warfighting command capabilities. However, the PLA currently still lacks cross-service cooperation and actual joint warfighting experience. In the future, the PLA hopes to integrate C4ISR, new command architectures, and joint logistical support systems to achieve joint operation capabilities across services.

#### 3. Unified Revolution of Military Affairs

In response to the complexity and variability of modern military operations, the PLA initiated a unified revolution of military affairs for joint operations in 2004. A unified training model tailoring to the specific training needs of the information technology era were established for all military branches and services. The adjusted and innovative training subjects comprise six areas including battlefield information, command and control, joint strikes, general support, full spectrum protection, and its so-called "three warfares".(public opinion, psychological and legal warfare)

The programming to enhance unified joint operations is phased into three stages: in 2005, the PLA's General Staff Department and individual Military Regions were actively involved in enhancing the unified joint training requirements. All training and reforms will be gradually applied to the entire military. There will be major enhancements in the realization of a mechanized and IT-driven force by 2010. There will be a transformational leap prior to 2020. The contingency mobile force will be fully mechanized and IT-driven according to the schedule indicating the push for unified training is aligned with the equipment upgrade schedules.

#### 4. Exercise to Fortify Armed Forces and Branches

To effectively enhance field combat capabilities, the PLA is actively conducting training exercises among various services and branches. In 2005, the PLA's various services and branches held over 100 exercises focusing on naval training, amphibious landings, air defense, electronic warfare, anti-terror, and joint operations exercises. Amphibious training focused on the invasion of Taiwan and the PLA conducted over eleven such exercises within the last 6 years. Recent large scale joint and combined exercises of the PLA are all held in the inland regions in order to hide their intentions and warfighting capabilities from Taiwan. Besides enhancing the effectiveness of their joint



operations capabilities and expressing its determination to defend its sovereignty to the international community, such exercises can also achieve the effects of military intimidation against Taiwan. The PLA's recent exercises and training are summarized as follows:

#### (1) Second Artillery

To enhance contingency response readiness capability, the PLA troops are undergoing cross-region mobility training in case of contingency operations against Taiwan. The emphasis is on various missile testing, test launches, and equipment operational drills, which indicates that the PLA spares no efforts in enhancing its strike power of tactical missiles.

#### (2) PLAAF

Participating in joint exercises is the principal task of the PLAAF. Enhanced joint exercises and the inspection of ground logistic support and maintenance capabilities, worth to provide an all-weather rapid direct (indirect) combat support capability. In 2005, the PLAAF participated in over ten major joint exercises with other services, organized subordinate branches to important combined-weapons systems training, and conducted year-end evaluations to verify annual training results.

#### (3) PLAN

In 2005, they focused on joint and combined-weapons systems exercises in coordination with new weapon testing schedules to enhance sea dominance capabilities. They also coordinated with the air and ground forces in more than ten joint air-sea and amphibious landing exercises. Main subjects included communication coordination, operational command and control, and logistics support to enhance overall joint operation effectiveness and efficiencies.

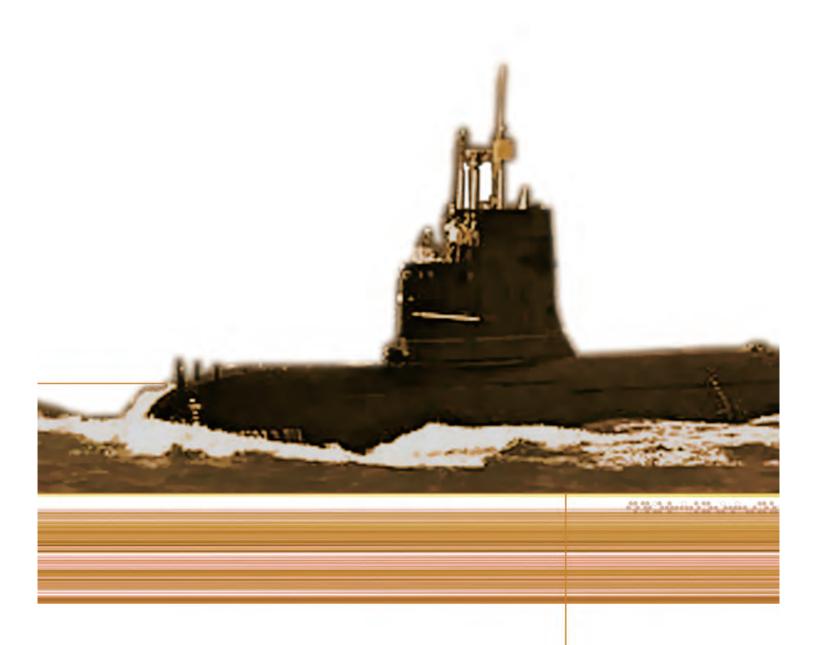
#### (4) PLA Ground Force

Ground troops deployed in coastal military regions focused on beach training implemented for amphibious landing, streamlining command procedures, disembarkation, and ground combat exercises to improve joint landing capabilities. In 2005, there were over twenty major exercises focused on contingency operations and amphibious landing training in preparation for future invasion of Taiwan.

#### (5) Anti-terrorism Exercises

The PLA participated in over forty international and domestic anti-terror exercises with neighboring countries focusing on the three fundamental missions of anti-terrorism "defense, rescue, and strikes." The aim is to be familiar with various anti-terror operations and joint command capabilities to eliminate potential terrorism attacks.

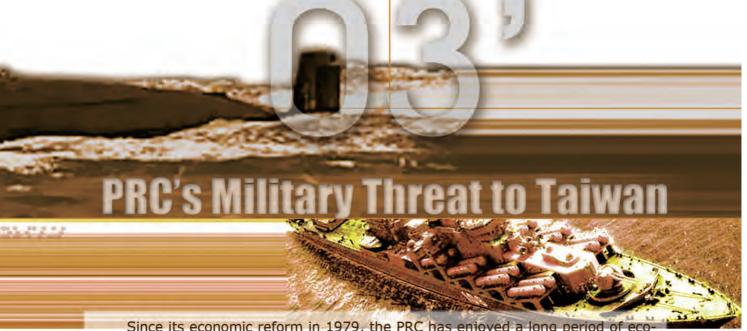




# Chapter 3

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- PRC's Military Strategies toward Taiwan
- II. PRC's Military Deployment toward Taiwan
- III. PRC's Military Capabilities against Taiwan
- IV. PRC's Military Maneuvers against Taiwan
- V. PRC's Possible Military Means of Invading Taiwan



Since its economic reform in 1979, the PRC has enjoyed a long period of economic growth and gradually attained the status of a global power in politics and foreign policy. However, despite international expectation of a peaceful role from the PRC, it never abandons its military options against Taiwan. There have been persistent weapon acquisitions and warfighting preparations toward Taiwan in recent years and the efforts have been intensified. Analyzing the current PRC military deployments and the development of its potential, its offensive capabilities against Taiwan will include multi-dimensional attacks, electronic paralyzsis, long-range precision strikes, and a prompt and decisive battle. These capabilities can apply under different circumstances or in conjunction with military coercion, paralyzsis warfare and full-scale invasion, creating intense pressure and challenges for Taiwan's defense preparations and operations.

**I. PRC's Military Strategies toward Taiwar** 

Since the founding of the nation in 1949, the PRC has never renounce its military options against Taiwan. Recently, the PRC continuously utilize its military exercises and force demonstration opportunities to pinpoint and intimidate Taiwan to achieve its political objectives. The PRC's military policy towards Taiwan, from Deng Xiaoping, Jiang Zemin to Hu Jintao, has focused on the fundamental directive of "peaceful unification" and "one country, two systems," underscoring the use of force as the last resort. The aim is to confuse international perceptions through peaceful unification and win public perception among the Taiwan public. Simultaneously, the PLA is also actively modernizing its military to accelerate its overall warfighting capabilities. It intends to use military threats to affect Taiwan's national sentiments and policies, while not ruling out the possible use of military force in the future to force unification. In all, the PRC's military threats and preparations under the peaceful policy are of great threat to Taiwan's security. The current PRC military strategies against Taiwan can be observed in the following five areas:

#### 1. Possible Timing for Invasion Taiwan

Taking into consideration its economic growth and political stability, and barring unpredictable factors, the PRC is unlikely to pick up fight against Taiwan in the near future. However, with its overall growth and military expansion, the PRC will have a favorable position in its use force to solve the "Taiwan question" when it secures its military dominance.

Nonetheless, a military invasion like this is also subject to international situations, the PRC's internal political and economic development, and the cross-starit dependence. At present, Beijing is still watching closely Taiwan's policy directions.

#### 2. Justifying and Legalizing Invasions against Taiwan

On March 2005, the PRC National People's Congress passed the Anti-Secession Law authorizing the military to adopt non-peaceful and other necessary measures to resolve the Taiwan issue under specific conditions. This legalizes the lawfulness of its use of any military and non-military measures in resolving the Taiwan issue and the PRC will follow up with other related statutes in the future. If military conflicts break out across the Taiwan Strait, the PRC can use this law to justify its military actions. This will prevent the application of international laws regarding illegal wars and the use or threat of force from being applied to its invasion against Taiwan, and thus lower the likelihood of international intervention.



#### 3. Combined Applications of the Three Non-Military Warfares

In 2003, the PRC revised the "Political Work Act" to incorporate public opinion, psychological, and legal warfares as the "three warfares" and listed them as official operations toward Taiwan. The purpose is to integrate related measures and achieve political objectives through non-military means, which may cultivate a favorable foundation for future military action. Overall, the PRC intends to utilize public opinion and psychological warfare to sabotage and disseminate dissension within. This aims to eliminate Taiwan's morale, resilience, and unity while controling their own ethnic and nationalist sentiments, with a view to harness consensus and support for non-peaceful policies against Taiwan. Through legal warfare, the PRC also intends to weaken Taiwan's sovereignty, form rational justification for a future invasion against Taiwan, and prepare for legal issues that may arise from invasion against Taiwan.

#### 4. Enhancing War Preparations against Taiwan

Since the end of the 1970s, the PRC's economic reform has accomplished considerable results in the modernization of agriculture, industry, and technology. It is currently pursuing defense modernization to set the foundation for becoming a major global power. Especially since the 1990s, the PRC has relied on its rapidly growing economic power to develop modern military capacities. Its rapid developments in Navy, Air Force, ballistic missile, information warfare, and aerospace capabilities have been very beneficial for achieving quick victories against Taiwan. Recently, the PRC's military officials insisted that the "Taiwan issue" cannot be delayed indefinitely, and proclaimed that war is inevitable in resolving Taiwan issue. On September, 2004, as Hu Jintao attended the first meeting of the CCP Central Military Affairs Commission after becoming the chairman of the Central Military Affairs Commission, he demanded full-speed revolutionary, modernized, and normal-



ized force construction efforts to prepare for military conflicts. These developments facilitated with its aggressive push for military modernization, clearly indicate the PRC's insistence on forced unification. Besides continuing to impose military pressure against Taiwan, the PRC is also enhancing various war preparation efforts. Relevant measures include:

(1) Second Artillery brigade facilities enhancements

△ Figure 3-1 Satellite photograph of the PLA Second Artillery missile brigade facility enhancements



△ Figure 3-2 Satellite pictures of the PLA's reactive airport as transit base



△ Figure 3-3 Satellite pictures of the PLA's Intention to build aircraft carrier

Cited example is the Jiangxi Leping 815 missile brigade, approximately 700 km from Taiwan. Satellite pictures indicate that the brigade contains a headquarters, administrative building, training field, and warehouses. Over 100 Dongfong-15 missiles with range of 800km are deployed, which can be used to attack Taiwan through railroad transportation to Fujian province. (Refer to Figure 3-1, Satellite photograph of the PLA Second Artillery missile brigade facility enhancements)

### (2) Reactivate airports as tran-sit bases

Fujian's Lienchung was originally an idle airport. Reconstruction began in 2001 and, by 2005, Sukhoi-27 have stationed in the airport and frequently participated in military exercise in the west of Taiwan Strait. Satellite pictures indicate these planes are equipped with air-to-air missiles which may be the AA-12 with range of 80km and posing a severe threat against Taiwan's aircraft. (Refer to Figure 3-2, Sat-

ellite pictures of the PLA's reactive airport as transit base)

#### (3) Intentions of building aircraft carrier

From May to November 2005, the previous Russian aircraft carrier Varyag was found to be undergoing repairs and main deck rust-removal in Dalien Naval Shipyard, Liaoning, which differs from the official tourism purpose when it was purchased in 1998. Analyses suggested that Varyag might be a carrier training ship and could be transformed into the PLA's first aircraft carrier if necessary. When Varyag is deployed off the Taiwan east coast beyond the flight range of ROC's fighter, Taiwan's defense might become vulnerable. (Refer to Figure 3-3, Satellite pictures of the PLA's Intention to build aircraft carrier)

#### (4) Simulated facilities of Taiwan for assault exercises

In September 2005, the PLA conducted assault exercises on simulated Taiwanese defense fa-

PRC's Military Ihreat To Taiw

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## (5) Intensify takeover exercises of Taiwan's islets

The PLA's major military regions are each equipped with tactical training bases, which organize combined armed service training rotating between troops in different bases on an annual basis. Satellite pictures indicate that the combined tactical training base in the Anhui Sanjie region in Nanjing contain target areas named after major po-



△ Figure 3-4 Satellite pictures of the PLA's Modeled Taiwanese Facilities used in Assault Exercises



△ Figure 3-5 Satellite Pictures of the PLA's Intensified Takeover Exercises of Taiwan's Islets

sitions in Taiwan's islets, such as Kinmen's Taiwu Mountains, Matzu's Yuntai Mountains, etc. This indicates that this military region is intensifying training on takeover operations of Taiwan's islets. (Refer to Figure 3-5, Satellite Pictures of the PLA's Intensified Takeover Exercises of Taiwan's Islets)

#### 5. Continuous Military Threats

The PLA's capabilities for invading Taiwan improve annually, offering it a diversity of options in making threats or actual military actions against Taiwan. If the PRC executes military action toward Taiwan, its main goal will be to quickly disintegrate Taiwan's national willpower, block potent foreign intervention, and force our government to enter negotiation under terms favorable for the PRC. The PRC can also opt to create military tension over Taiwan Strait through military intimida-

tion (but not major armed invasions against Taiwan), or gradually intensify military pressure against Taiwan to force our government to surrender.

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# II. PRC's Military Deployment toward Taiwan



Recently, the PRC is actively introducing advanced foreign weapons and technologies, including high-performance Sukhoi fighter, early warning aircraft, large cargo planes, Kilo-class submarines, and Sovremenny-class destroyers. Furthermore, the PRC has accumulated and improved various ballistic and cruise missiles and indigenous weapon systems, causing the military balance in the Taiwan Strait to tilt over to the PRC. Possible military deployments against Taiwan are analyzed below:

#### 1. Second Artillery

Among the PLA's regular ballistic missiles, short-range missiles are currently concentrated in the Nanjing and Guangzhou Military Regions. The number of enhanced models is growing steadily each year which makes it possible to assault Taiwan remotely. The deployed short-range missiles provide general fire support for tactical use when invading Taiwan. Up to the end of 2005, the PLA had deployed 784 mobile Dongfong short-range missiles, with an addition of 75 to 100 produced annually. The PLA also researches on the application of ballistic and cruise missiles for anti-carrier and land assault operations.

#### 2. People's Liberation Army Air Force (PLAAF)

The PLAAF troops against Taiwan consist of anti-air defense and various fighters and bombers with over 3,400 possessing combat capabilities. Combat support includes over 90 reconnaissance planes, and some 300 transport planes, 10 of which are large transport planes. The PLAAF's elite fighters and the Sukhoi fighters purchased from Russia are mostly stationed in the eastern bases providing fast air strikes against Taiwan.

#### 3. People's Liberation Army Navy (PLAN)

The PLAN force against Taiwan has modernized its fleets in the last decade by gradually retiring parts of the aged fleets and replacing them with fewer but newer vessels which include approximately 70 large surface combat vessels, 60 attack submarines, over 40 large amphibious transport



ships, and 50 coastal missile patrol crafts. Two-thirds of the vessels assigned under the East and South Sea Fleets can engage in immediate combat against Taiwan. When necessary, the North Sea Fleet and related resources can also be incorporated to support combat. Recently, the PRC has purchased high-performance weapons from Russia, including Sovremennyy-class destroyers and Kiloclass submarines, which are both assigned to the East Sea Fleet, and directly pose grave threats against Taiwan's maritime security.

#### 4. People's Liberation Army (PLA)

PLA troops have a relative advantage in quantity over Taiwan (combat troops against Taiwan contain approximately 400,000 personnel stationed in Nanjing, Guangzhou, and Jinan Military Region; an increase of 25,000 personnel between 2005 and 2006). The Nanjing Military Region, directly facing Taiwan, has 3 group armies, which would serve as the backbone for a PLA invasion against Taiwan. Additional troops are available from Guangzhou and Jinan Military Region to increase warfighting capabilities. However, despite the PLA's advantage in terms of the quantity of ground troops, its required air, logistics and naval support for full ground operation is not available, making landing and air assault operations difficult. Therefore, the PLA is developing various air and sea transport methods to effectively support military operations against Taiwan.

#### 5. Air Assault Forces

Recently, the PLAAF is enhancing the application of air assault forces. The PLAAF has devised combat support tactics for landing operations, and also purchased new weapons and transport vehicles to enhance air assault warfighting capabilities. Therefore, in future battles across the Taiwan Strait, the PLAAF will use its air assault forces to conduct special operations to secure strategic positions, sabotage major political, economic, military, and life-sustenance facilities, or block Taiwan's mobile support and military maneuvers.

#### 6. Special Forces

The PLA's special forces are individually deployed in each of the seven major military regions, and primarily responsible for battlefield reconnaissance, infiltration, and containment of enemy forces. Currently, they already possess night maneuver parachuters, helicopters, and assault boats for collecting information and penetrating deep into desired target areas. In future military conflicts, special forces can participate directly in combat or perform reconnaissance missions, to support campaign and tactical operations of other forces.





### III. PRC's Military Capabilities against Taiwan.

In the past few years, the PLA's military exercises have been increasingly geared towards real combat scenarios, emphasizing the precision execution of the mission and the enhancement of actual combat capabilities. Exercises related to joint air-and-sea strikes, air assault, irregular landing operations, amphibious landing operations, and long-range pursuit are all highly Taiwan-specific. Also, the PLA has built a full-scale simulation training ground, the Dingxin base in Gansu, imitating the Taichung Chingchuengang airport and Kaohsiung Tsoying naval base for simulated assault exercises. Recently, the PLA also held bombing exercises in the Dahuo and Nanjeushan islands in Guangdong and Zhejiang coastal areas with terrain similar to Taiwan's islets. This indicates that the PLA's Taiwan-specific simulated terrain exercises have extended from inland to the coastal regions. The above developments clearly indicate the PRC's intentions and preparations against Taiwan. Its current trends of intensified military preparations and future military emphases against Taiwan can be summarized as follows:

#### 1. Precision Missile Strikes

The PLA is deploying short-range Dongfong tactical ballistic missiles capable of carrying submunition warheads; they can also carry graphite or fuel gas warheads (40 meters circular error probable), and can reach Taiwan in 7 minutes. The PLA has started deploying cruise missiles (10 meters circular error probable) to perform precision strikes against designated political, military targets and key nodes to conduct decapitation and disabling of Taiwan's command and control systems. The PLA also intends to execute offensive air operations to paralyze Taiwan's overall air defense, complemented by attacks against naval and air bases, stationed area for mobile, armored vehicle and army aviation troops, and key infrastructure nodes. There would also be sub-launched land attack missiles against Taiwan's strategic bases on the east coast, with an emphasis on increasing the strike precision of ballistic and cruise missiles.

#### 2. Landing Assault Capability

#### (1) Special forces assault

The PLA's special forces consist of over 17,000 personnel. They primarily conduct battlefield reconnaissance, infiltration of key areas, assaults, takeover, containment and eliminating major military targets, and contingency mitigations. They possess contingency combat capabilities by land, air or sea.

#### (2) Air assault

<u>0'3'</u>

PRC's Military Threat To Taiwa



The PLAAF's air assault troops consist of approximately 40,000 personnel, equipped with over 80 transport aircrafts. If the PLAAF launches a surprised assault against Taiwan, they can be parachuted onto Taiwan within 6 hours to conduct long-range maneuver and assault operation.

#### (3) Amphibious assault

The PLA's marine corps consist of over 8,000 personnel capable of performing conventional and non-conventional landing operations. They are newly equipped with modern amphibious armored vehicles, air-cushion landing craft, new self-propelled artillery and anti-tank missile vehicles. During pre-assault operation, they primarily act as the spearhead for joint amphibious operations

and are responsible for the construction of beachheads.

# 3. Highly Mobile and Fast Transport

#### (1) Railroads and highways

Recently, the PRC is focus-ing on the construction of rapid transport system such as the Zhegan, Longhai, Jingguangjeu, and Yingxia railroads, and highway networks from Inland to southeastern coast to greatly increase their military flexibility and mobility. Also, in response to cross-strait situations, the PRC is actively enhancing the construction of major passageways and critical border highways with neighboring countries for troops' maneuver. It is estimated that the PLA can use railroads and highways transportation to facilitate troops'



△ Figure 3-6 PRC's Regional Railroad Map



△ Figure 3-7 PRC's Regional Highway Map



maneuver in the Beijing, Jinan, Nanjing, and Guangzhou Military Region. Troops can be transported simultaneously to coastal ports by multiple routes, and quickly mobilized to desired regions. In the future, it will be much more difficult for Taiwan to monitor the PRC's troop maneuver. (Refer to Figure 3-6 and 3-7, the PRC's Regional Railroad and Highway Maps)

#### (2) Maritime transport

Currently, the PLAN possesses 29 major ports with 8 under construction. To respond to the future needs of new vessels, nuclear submarines, large ships, and the needs to increase the efficiency in coastal logistics operations, the PLAN is actively upgrading and expanding its military and commercial ports, routes, and the docking facilities. The PLAN is also gradually enhancing modernization of its medium and small ports to form port groups centered on large military ports and networked with medium and small ports. This is beneficial for economic development in the southeastern costal areas, also enhancing the amphibious operations capabilities and capacity for naval material transportation and supply.

#### (3) Air transport

There are 95 airports along the southeastern coast of China within 1080 km (600 miles) of Taiwan, 30 of which are military airports, 28 of which are military and civilian dual use airports. In wartime, they can provide shelter for over 1,300 fighters to conduct combat missions. The PLAAF also possesses over 330 transporters.

#### (4) Military Communication

The PRC has completed the construction of the 8-vertical and 8-horizontal foundational optical fiber network grid with use of satellite, optical fiber, frequency-hopping, digital, encrypted, and wired communications to ensure security. Also, the PRC plans to launch communication and reconnaissance satellites with military applications. In the future, the PRC may integrate military and civilian optical fiber networks into modernized digital networks to establish a tightly integrated military communication architecture.

#### 4. Establish Mobilization Mechanisms

The PLA currently possesses over 60 reserve division or brigade level units with over 800,000 personnel. Currently, the PRC has over 1,300 commercial vessels subsumed and registered under militia organizations so that they can be employed to support combat missions and rapid mobilization in wartime. Each military region annually performs at least one leasing and transport exercise to increase peacetime-to-wartime transition so as to enhance mobilization capabilities. Currently, the PRC has issued the Defense Mobilization Act for Civilian Transportation, establishing mobilization committees for all military regions, provincial commands, and military sub-regions, which handle vessel mobilization, organization, and exercises. The emphasis is on the integration of military, ci-

RC's Military hreat To Taiwa



vilian, peacetime and wartime functions. They are coordinated with the defense transportation mobilization plan to ensure contingency mobility for the rapid strike capabilities of combat troops.

#### 5. Enhance Logistics Support

The PLA's General Equipment Department, General Logistics Department and Commission of Science Technology and Industry for National Defense (COSTIND) joint to form the Logistics Technology Development and Exchange Center focusing on equipment research for battle and military region support. The purpose is to reduce the time on classification, storage, distribution, and transportation of combat materials. They hope to establish a logistics system capable of integrating regional and organizational support while integrating general and specific supplies. There are seven Military Region Combined Logistics Support Zones, which provide an armed forces, military and civilian, and peacetime-and-wartime integrated maintenance and supply system. The PLA continues to explore methods to unify joint logistics support, perfecting the "grand joint logistics" policy, enhancing the existing logistics system to resolve issues of repetitive construction and low efficiency, etc. The goal is to support contingency operations.

National Defense Report

IV. PRC's Military Maneuvers against Taiwan



Of all the aforementioned military capabilities, the current main PRC threats toward Taiwan are still focused on military intimidation and blockades. With analysis based on factors such as the modernization schedule of the PLA military, strategic concept developments, force structure and deployment and capacity of weapon research show that, the PLA's future combat capabilities against Taiwan might be increasingly perfected, and exhibited the following characteristics:

#### 1. Multi-dimensional Assault Mode

The PRC will invade Taiwan utilizing its integrated political, economic, military, psychological and diplomatic powers with application of various high-tech weapons as well as conventional attacks and non-conventional infiltration and sabotage tactics. The purpose is to inflict multi-dimensional and multi-level strikes using asymmetric and nonlinear combat methods to rapidly destroy or paralyze Taiwan's strategic defensive postures and achieve decisive results.

#### 2. Complete Electronic Paralysis

Prior and throughout the progression of war, the PLA will utilize satellites, military hackers



troops, and electronic warfare troop to execute all-out electronic warfare against Taiwan, infiltrate Taiwan's computer network infrastructure, disrupt operationbattlefield deployment and logistical facilities, sabotage civilian traffic, electricity, telecommunications, and financial networks to create chaos and fear in Taiwan society. The PLA may also utilize electromagnetic pulse weapons to directly paralyze Taiwan's C<sup>4</sup>ISR systems to gain complete control of the electronic spectrum over Taiwan.

#### 3. Long-range Precision Strikes

The early stage of war might be initiated by a large number of attacks by the PRC's tactical missiles, cruise missiles, anti-radiation missiles, unmanned aerial assault vehicles, and air forces to rapidly penetrate defense across the Taiwan Strait. This is to strike critical targets such as the political and economic nerve centers, military bases, airports, ports, logistics supply facilities, radar surveillance system and C<sup>4</sup>ISR systems. This could rapidly weaken Taiwan's defense capabilities and paralyze the ROC Armed Forces.

#### 4. Victories through Shock and Awe

The PLA might use its quantitative advantage in tactical and cruise missiles, combined with Navy and Air Force, to perform long-range precision strikes against Taiwan's important military facilities and major troops deployment areas, and eliminate Taiwan's Navy and Air Force, and paralyzing Taiwan's ground forces. After securing superiority on the air and sea dominance, the PLA will combine special forces, air assaults and amphibious operations with naval and air transport to project a large amount of forces to take over Taiwan's major political and economic nerve centers to achieve the strategic goal of "winning a campaign in a remote area quickly, and winning the first campaign decisively."

# National Defense Report V. PRC's Possible Military Means of Invading Taiwan

Based on the analysis of various information, the PRC's possible military actions against Taiwan, according to political intentions, intensity and scale of conflicts, can be divided into three categories of intimidation, paralyzation, and invasion warfare. These methods are summarized as follows:



#### 1. Intimidation Warfare

This type of actions involves the feature of gradual increase of military pressure, the show of force, the flexible use of tactics and blurring of conflict boundaries. The intent is to force surrender or inflicting psychological damage against the will to fight utilizing all military means without initiating a full-scale war.

#### (1) Large-scale Military Exercises

Using psychological warfare concepts by gathering major forces at coastal regions to perform exercises and firepower demonstration and spreading rumors of war through the media, and subsequently evoke panic in Taiwan to force surrender.

#### (2) Network and Electronic Interference

Using special agents or hackers, the PLA may disrupt Taiwan's political, economic, military, and media network systems, or adopt public opinion against Taiwan to cause disturbances and increase psychological pressure against Taiwan.

#### (3) Naval-and-Air Fleet Provocations

This is to conduct provocative actions by sending aircraft or warships across the central line of the Taiwan Strait. The PLA may initiate warnings and threats to suppress Taiwan's fleet activities, increase military pressure, and wear out our morale in a psychological manner.

#### (4) Partial Blockade

Through military exercises or missile test launches, the PRC may announce Taiwan's outbound maritime routes including the islets as restricted areas, forming partial blockades through maritime interceptions and exercises.

#### (5) Full-scale Blockade

The PLA may declare Taiwan's flight zone and maritime areas as no-fly or no-sail zones or announcing complete blockades. They may use aircraft or submarines to lay mines on ROC's major ports, maritime routes and coastal areas and maintain full-scale and continuous blockades to force surrender by the Taiwan authorities.

#### 2. Paralysis Warfare

This type of actions consists of the feature of surprise, long-range, precision, non-contact-ambush, long-range, precision, non-contact, and nonlinear characteristics, with the aim of rapidly paralyzing Taiwan's command and control system and political and military nerve centers and disintegrating Taiwan's organized military operations.

#### (1) Cyber Warfare

The PLA may use electronic jamming system as well as hackers, computer viruses, and information time bombs to attack Taiwan's central command system, paralyzing Taiwan's tactical and



strategic command and control mechanisms.

#### (2) Saturation Missile Strikes

The PLA may use tactical ballistic and cruise missiles to perform saturation attacks so as to destroy Taiwan's political and economic centers, C<sup>4</sup>ISR systems, and important military facilities, and to disintegrate Taiwan's combat willpower.

#### (3) Joint Precision Strikes

The PLA may use tactical ballistic and cruise missiles, as well as unmanned aerial vehicles, to conduct long-range strikes against Taiwan's strategic and critical locations, followed by remote-controlled, conventional and/or precision munitions strikes to paralyze Taiwan's warfighting capabilities.

#### (4) Takeovers of Major Centers by Special Operation

The PLA may use special operation infiltration and hidden personnel within the island combined with air, air assault, and amphibious strikes to conduct multi-pronged strikes against Taiwan's northern garrison areas, paralyzing and controlling Taiwan's political and economic centers through simultaneous attacks to rapidly disintegrate our government's decision-making mechanism and responsiveness in order to achieve a prompt victory.

#### 3. Invasion Warfare

This type of action includes features such as rapid strike, shock and awe, high intensity, and large-scale fatalities. The PLA might use all military means for military takeover.

#### (1) Islet Invasion

Taking over islets such as Kinmen and Matzu to damage morale of our people, or forcing our government to enter political negotiations.

#### (2) Beyond Island Invasion

Taking over the Penghu islands to serve as a stepping stone for subsequent attacks against Taiwan.

#### (3) Main Island Invasion

Direct large-scale military actions against Taiwan.

In the future, the PLA will conduct low-cost, highly effective, rapid-strike, and prompt-showdown combat maneuvers. It is highly unlikely for the PLA to conduct paralyzation or invasion warfare against Taiwan under the current environment, considering strategic benefits, military development schedules and other objective and subjective limits that the PLA is facing today. The most likelihood of the PLA to conduct operation against Taiwan prior to 2008 is through intimidation. After 2008 or 2010, the PLA's military developments will become more complete in terms of quantity and quality. If the cross-strait military balance continues to be distorted, and Taiwan's military power

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cannot be adequately transformed, it will be beneficial for the PLA to employ intimidation, paralysis, and invasion warfares jointly to pose extreme threats against our security. Therefore, our Armed Forces not only need to accelerate defense transformation based on the future threats to enhance combat readiness and gain relative advantages, but also need to implement all-out defense to combine the nation's overall strength, perfecting our all-out defense system in order to ensure national security.







# Chapter 4

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- I. Defense Resources and Constraints
- II. Social Expectations
- III. The Quest for a Nationalized Defense
  Force

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## Domestic Factors

Broadly speaking, the driving force for the national defense transformation is derived from two different aspects; external factors and internal factors. Previous chapters have explained changes in security status and mode of threats, which are all external factors. These factors are full of uncertainty and unpredictability, and the measures with which we can respond are mostly passive. On the contrary, various domestic factors that catalyze military transformation create a more immediate and direct impact on military reforms and must be responded to quickly. These include limitations in national defense resources, public opinion and expectations, and demands from the strategist community. This chapter will explain internal factors that drive military transformation forward.

National Defense Report

#### **I. Defense Resources and Constraints**



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National defense is part of the nation's overall infrastructure, and thus, when allocating resources, the nation's overall policy must be taken into account. In the past few years, the nation's overall development plan focused on economic development and social welfare, aiming to raise national competitiveness and improve the people's well-being. Therefore, the government has made large investments in economic development, education, science, culture, and social welfare in order to realize the objectives set out in the nation's overall policy. Under these circumstances, the national defense budgets have not decreased, but were taking up smaller and smaller percentages of the GDP and the central government's budget.

While Taiwan strives to develop its social and economic infrastructures, the PRC is persistently building up their military preparations against Taiwan. They have deployed various advanced

he Jingjin Program refers to the provement of military structure and organization" project. This is a restructuring program that combines RMA philosophies, assessments of the operation of the Two Defense Acts (National Defense Act, and Organization Act of the Ministry of National Defense), changes in enemy threats, and adjustments in strategic thought. It also seeks to reform national military structure and organization in order to address future defense operation needs. The first stage of the program started with restructuring work in 2004, After registering all incoming and existing troops in July 2005, we will continue to stage 2 organization reforms. Before the end of 2008, total personnel will decrease to 275,000 persons (250,000 personnel establishment, 25,000 maintenance personnel). This reduced echclon of chain of command allows commands to be executed more quickly and logistical support to be more flexible. This will enhance joint operations capabilities of the armed forces and achieve complete transformation.

fighters, warships, and anti-aircraft missiles near Taiwan's sovereign waters, and have over 700 short-range missiles that can target Taiwan's political, military, and economic centers. Considering the PRC's increasing degree of threat against Taiwan, and military advantages that are gradually tilting in the PRC's favor across the Taiwan Strait, the government must address such security challenge by making appropriate investments in the MND to ensure Taiwan's safety and development. In doing so, not only can we effectively protect the Taiwan Strait, but we also demonstrate to the world Taiwan's determination to defend itself.

In the foreseeable future, Taiwan's GDP, government and defense budgets are not expected to increase greatly. Other than that, defense budgets may still be limited due to funding priorities for civilian programs. Because future

Domestic Factors



defense budgets still cannot satisfy the needs of military buildup, we need to "first focus on personnel maintenance, followed by operations and maintenance and military investments," to sequentially realize the objectives of military preparation. Facing these hardships, the MND will strive to acquire appropriate funding for national defense in the future in order to address increasing gaps in military strength between Taiwan and the PRC.

In the future, the Armed Forces will continue with the Jingjin Program's second-stage work, accelerate streamlining of personnel and simplification of service allowances, control the growth of personnel maintenance costs and operational costs, and maximize the effectiveness of military investments. In terms of national defense budgets, we will continue requesting the Executive Yuan to consider the needs of our military development and combat preparations, and to scale national defense budgets proportional to the GDP and central government budgets, so that national defense budgets receive appropriate funding. Also, in consideration of the peculiarities in national defense investments and limited resources, the MND may integrate military developments with economic developments in the future through industrial cooperation programs and privatization of resources. In this way, resources can be more effectively used and the defense establishment can make concrete contributions to public development.

National Defense Report

#### **II. Social Expectations**



In democratic societies such as Taiwan, public opinion has a certain degree of influence over public policy planning and implementation. Public opinion can cover many issues. It can mean inquiries, social discourse from the news and media, or even discourse and research among the strategist community. These opinions outside the national defense system act as important catalysts in defense transformation. They not only directly influence the outcome of defense policies, but also carry, to a considerable degree, supervision functions in implementation stages. With information proliferating in society, national defense information becoming more transparent, and increased participation from the strategist community, the role and influence of public opinion expectations on national defense affairs will increase with time.

"Consolidation of military policy and command branches" and "civilian control of the military" were major transformations undergone by the Armed Forces in response to public expectations. For a long time, the Armed Forces operated under a dual command system between military command and policy. The phenomena of the General Chief of Staff wielding authority without bearing responsibility and the Minister of Defense bearing responsibility without wielding authority had often been





subject to external questioning. This dualistic system was detrimental towards national defense policy implementation during peacetime and combat command during wartime. Therefore, the MND acted to respect public opinion. In order to establish a defense system with "uniformity between authorities and responsibilities" and "division of professionalization," drafting the National Defense Act and amendments for the Organization Act of the Ministry of National Defense began with consultation with academic experts and other knowledgeable individuals. The Two Defense Acts were passed by the Legislative Yuan on January 15, 2000, and officially ratified by the President in January 29, 2000, ushering in a new era for the operation of the national defense organization.

In the past few years, the Legislative Yuan's National Defense Committee has proposed many changes to the MND in accordance with public expectations. These suggestions include streamlining the Armed Forces' personnel maintenance costs, reinforcing defense weapon purchases and research, improving autonomy of defense industries, and enhancing the protection of the rights of military personnel in military service. The MND is able to take all of these public expectations into account. For example, we proceeded with the Jingjin Program to lower the size of armed forces, research on modern and high-efficiency weapons, consolidate the defense technology industries' capacities, and include military personnel into the National Health Insurance Program, which were all responses to public expectations for reforms in national defense affairs.

In fact, in order to increase the public's understanding of defense affairs, the MND has consulted with experts from various fields for advice on defense policies. The conceptualization and development for various policies all involved constant communications with external parties through the media, public hearings, MND routine press conferences, and invitations for academics and experts to participate in discussion forums. These actions could fulfill the needs of military buildup and combat readiness as well as satisfy public expectations. Currently, the ROC Armed Forces' defense transformation aims to respond to challenges against national security that arise from changes in the strategic environment. Relevant actions include weapons acquisitions, organizational restructuring, and improvements in training, which not only satisfy public expectations but also are greatly beneficial for enhancing combat capabilities. The MND hopes to gain needed support from the country's citizens for various projects, in order to accelerate the completion of defense transformation.





#### **III. The Quest for a Nationalized Defense Force**



Article 138 of the Constitution of the Republic of China states that "The land, sea, and air forces of the whole country shall be above personal, regional, and party affiliations, shall be loyal to the state and shall protect the people." This article is the conceptual foundation for the nationalization of the military and it accentuates the notion that servicemen should remain neutral and above politics in order to protect the nation. A nationalized military not only eliminates possibilities of military intervention in politics, but is also a solid power behind democratic political developments in the country. After the military is nationalized, national democratization can proceed with stability. Therefore, nationalization of the military is an important indicator of a country's democracy, and is also a goal strived for by the governments of many countries, including Taiwan.

With Taiwan's democratization, the public continues to demand nationalization of the military. Therefore, the ROC Armed Forces have undergone self-assessments and formulated measures to make the military nationalized and legalistic, turning it into a force that truly belongs to the nation. To ensure that the military remains politically neutral, which is one of the objectives of nationalizing the military, the MND declared, on September 18, 2002, that active-duty servicemen and cadets cannot participate in activities of political parties or organizations during or outside of work, pursuant to the Constitution of the Republic of China, the National Defense Act, and the Organization Act of the



△ A nationalized military will act beyond their personal, regional, and political convictions, and serve only the country and its people



Ministry of National Defense. On October 23, 2003, it was declared that, starting from November 1, 2003, social events for reserve servicemen cannot be held in military bases and that active military personnel cannot participate in similar activities. On December 15, 2005, it was declared that military personnel cannot participate in political activities without permission, and all servicemen within the Armed Forces are asked to fully obey these rules to fulfill their responsibilities of protecting the country and its people.

In accordance with the aforementioned regulations and after the following elections:

- December 1, 2001 Legislative Yuan and county magistrate and city mayor elections,
- January 26, 2002 township mayor and county and city councilors elections,
- June 22, 2002 town and village mayor elections,
- December 6, 2002 Taipei and Kaohsiung mayor and city councilors elections,
- August 1, 2003 Hualien county magistrate by-election,
- March 20, 2004 presidential and vice presidential elections,
- 2005 county, city, and township magistrates, mayors, councilors elections,

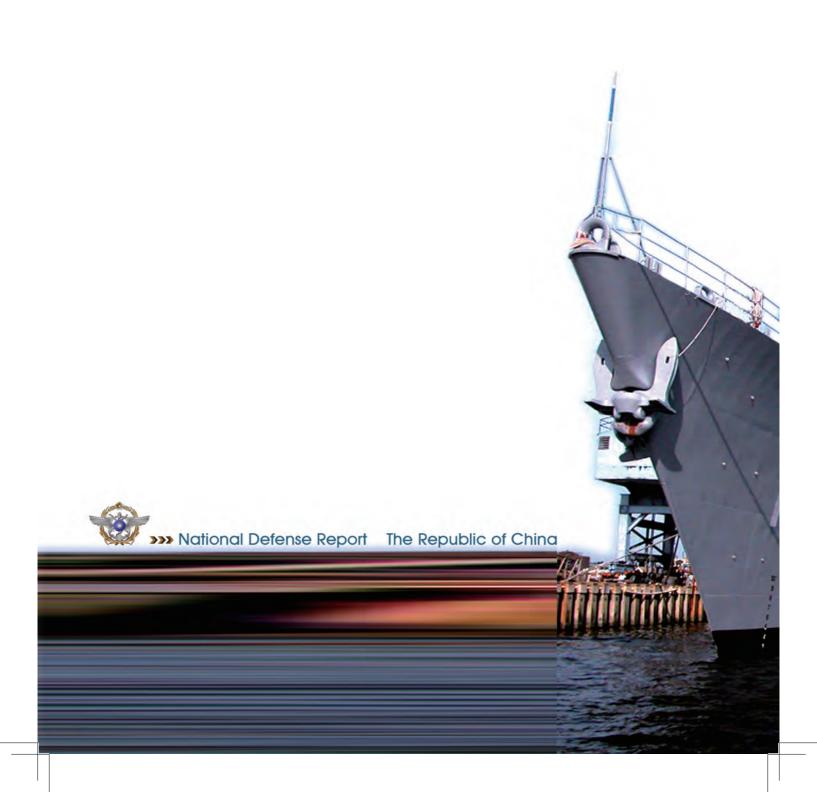
the Armed Forces have been widely accepted by society in their concrete demonstrations of loyalty to the country, to the people, and to their responsibilities. In other words, the Armed Forces belong to the nation and the entire population.

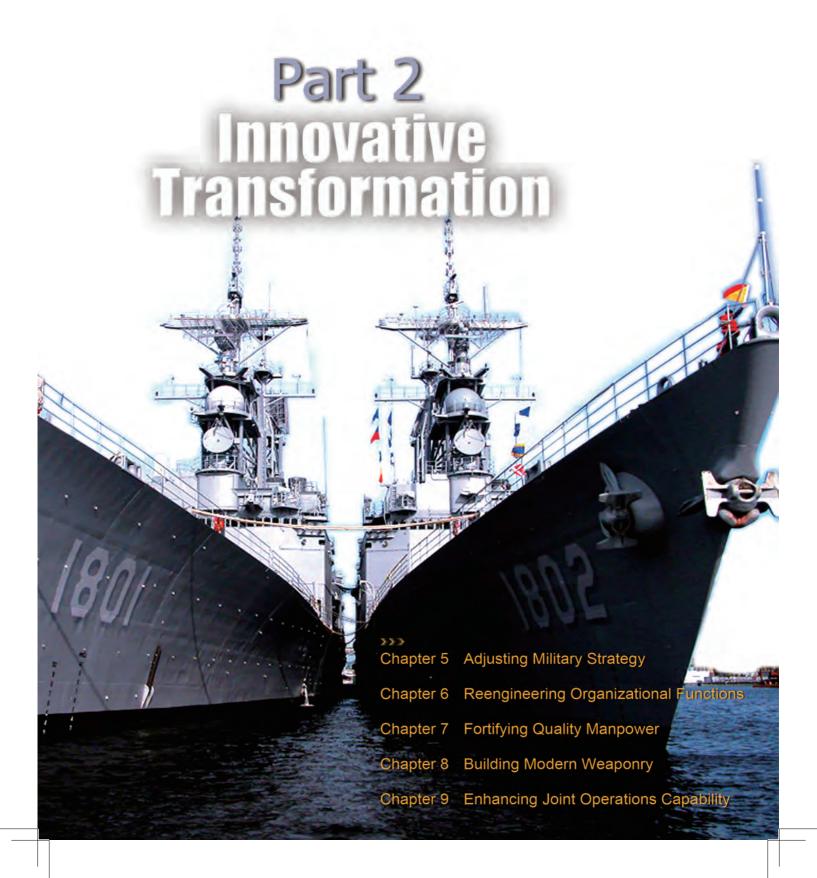
Most importantly, the ultimate objective for nationalizing the military is to increase the level of military professionalism and attain strong public support for the ROC Armed Forces so that the military personnel in each echelon of command can fully devote themselves to combat readiness training to increase combat efficiency. In order to increase military professionalism, the MND has already started recruiting professional enlisted personnel to address future warfare demands for high-quality manpower. From January 1, 2006, mandatory duty periods were lowered from 18 months to 16 months, so that excess manpower can be released into the domestic job market. Also, the MND will increase the military staff's professional discipline through personnel training and lifelong education. In the future, as the military becomes more professionalized, it will also solidify the principle of a nationalized military.





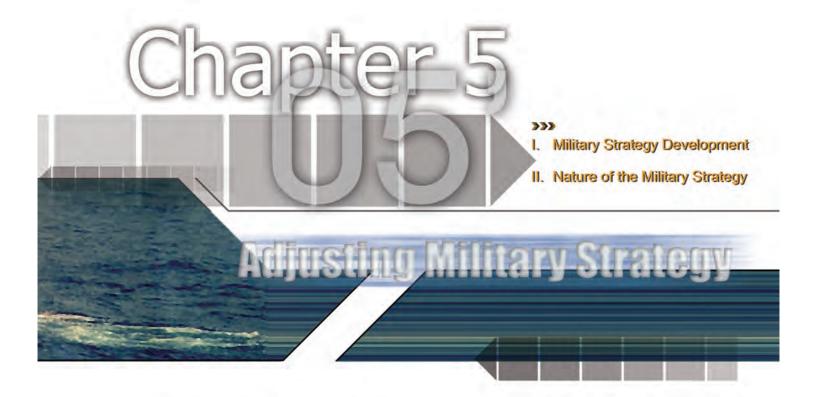












The evolution of Taiwan's military strategy began at the end of 1968. Systematic research into modern warfare theories started only after the establishment of the Armed Forces University (i.e. the previous incarnation of the current National Defense University). Currently, we have formed the preliminary strategic theory system with "national security" as its core. Since Taiwan is an island surrounded by waters, our military strategy planning is adjusted synchronously with the changes in environment and the levels of enemy threats. The current strategic concept is to develop a military force that is capable of conducting "effective deterrence and resolute defense."

National Defense Report

#### **I. Military Strategy Development**



Military strategy is part of the overall national strategy. Military, political, economic, and psychological strategies mutually support and enhance each other under the national strategy system in peacetime. In wartime, in order to guarantee the interests and safety of the nation, military strategy needs to convert national resources into defensive power with support and cooperation from political, economic, and psychological strategies to achieve the national objectives. Therefore, military strategy is an art in guiding the development and application of military power. It can serve as strategic guiding principles for all timeframes, and the basis for all military activities. Military strategy is also the center of national strategy. Its goal is to acquire the maximum probabilities and favorable outcomes in the quest for victory in wartime to support national strategies and achieve national objectives. This is the "development and use of force."

With the relocation of the ROC government to Taiwan in 1949, the military strategy of the ROC Armed Forces transitioned through the following four stages: "offensive posture," "unity of the offensive and defensive," "defensive posture," and "active defense." Relevant adjustments are summarized as follows:

#### 1. Offensive Posture (1949 to 1969)

Even as the armed forces migrated to Taiwan with the central government, military leadership within the government still endeavored in developing military capabilities hoping to reclaim the Mainland one day. "Preparation for opportunities to reclaim mainland china" based on offensive operation had become the strategic guidance for the era. All military preparation efforts were intended for the need to defeat the PLA with the main focus on building amphibious operations, naval, and air offensive capabilities.

#### 2. Unity of the Offensive and Defensive (1969 to 1979)

The PRC usurped the ROC's membership in the United Nations in 1971. The ROC Armed Forces hence adjusted its military strategy from "offensive posture" to a "unity of the offensive and defensive" based on the changing political environments in the Taiwan Strait. The need for defensive deployment gradually became the centerpiece of the force buildup efforts and increased accordingly on an annual basis.

#### <sup>2</sup> 3. Defensive Posture (1979 to 2002)

On January 1979, the United States changed its diplomatic recognition from Taipei to Beijing.

Adjusting Military Strategy

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In response to the changes in national status and international environments, the national construction efforts focused on building "a bastion of nation revival" with full speed ahead in economic development to raise the standard of living for our citizens. The ROC Armed Forces adjusted its military strategy again to a "defensive posture" and strived to comprehensively develop a well balanced Army, Navy, and Air Force in accordance with the force buildup schedules. Priorities of force buildup efforts based on the order of importance were "air dominance," "sea dominance" and "counterlanding operations." The intent was to achieve the force buildup goal through effective execution of the "strategic endurance but tactical expeditiousness" guidance.

The ROC Armed Forces developed its basic combat capabilities skills in performing effective defensive operations in 1995. The armed forces' strategic concept thus changed to "resolute defense, effective deterrence" in response to the mode of future warfare in Taiwan. The ROC Armed Forces were constructing an effective deterrence military with rapid response capabilities under the guidance of "elite, compact and robust." Objectives in air dominance were automatic operational control, and integrated air defense. Objectives in sea dominance were adopting missiles as major shipborne weaponry, command and control automation and conducting 3-dimensional anti-submarine operations. Objectives in counter landing operations were mechanization, 3-dimensional operations, electronic warfare, and automation.

#### 4. Active Defense Posture (2002 to present)

In 2002, the force buildup policy of the ROC made a strategic turn from passive to active. In accordance with the "all-out defense" policy, the strategic concept was changed from "resolute defense, effective deterrence" to its "active defense" equivalent of "effective deterrence, resolute defense." "Effective deterrence" refers to the building of counter-strike and defensive capabilities with deterring effects, and actively research and develop long-range, precision, deep strike capabilities to effectively disintegrate or stagnate enemy forces or firepower advancements, so that enemies will forego all military options after rational battle damage and casualty estimation. The armed forces also combined all-out defense power and joint warfighting capabilities to firmly conduct homeland defense, and to achieve repellence, deterrence, and destruction of enemy forces. The current joint warfighting force buildup efforts are developed under the strategic guidance of "technology advancement, information and electronics superiority, joint interception, and homeland defense" with the operational directive of "strategic endurance but tactical expeditiousness."





National Defense Report

#### **II. Nature of the Military Strategy**



As stipulated by the Constitution of the Republic of China, the goal of national defense is the protection of national security and to maintain world peace. The ROC Armed Forces should base on the fundamental objectives of "war prevention," "homeland defense," and "counter terrorism and contingency response" and establish the current defense policy considering the development of international environments and our enemy forces. Under the strategic framework of "effective deterrence, resolute defense," the ROC Armed Forces should also construct a deterrent force capable of conducting counter-strikes to achieve the goal of "war prevention." The goal of "homeland defense" and "counter terrorism and contingency response" can be achieved through suitable defensive warfighting capabilities. Therefore, continuous RMA reforms and development of high-tech weaponry is an important pathway to support the above mentioned policies and framework. Currently, the armed forces continues to integrate warfighting capabilities of individual services and the purchase or development of high-tech weaponry in accordance to the force buildup guidance of "technology advancement, information and electronics superiority, joint interception, and homeland defense" to form a strong defensive power with counter-strike capabilities. Detailed contents are explained as follows:

#### 1. Promulgation of All-Out Defense Concept

Warfare in the future will no longer be limited to military operations between defense forces. Non-military targets are more likely to be the victims of the first waves of attack. In responding to the asymmetric warfare activities, critical topics for defense security affairs include the establishment of the all-out defense mobilization mechanism to assure a comprehensive national security and the enhancement of crisis management capabilities. Execution of Taiwan's all-out defense includes measures in both peacetime and wartime. During peacetime, this is done through joint efforts from all levels of the government to complete a comprehensive preparations for manpower, material, and warfighting capabilities and accumulate overall warfighting capabilities in peacetime in support of regional emergency crises. In wartime, we will combine civilian powers in support of military operations and maintain emergency response needs for public agencies and basic living needs for our citizens. In efforts to enhance the principle of all-out defense, the MND has also addressed forward looking considerations for national security and crisis management. In the future, we will actively coordinate with other ministries of the Executive Yuan for the integration efforts. In terms of legal foundations, we will establish comprehensive administrative and military mobilization systems, hoping to accumulate adequate peacetime preparations of the overall national resources during peace-

time. In time of war or crisis, we can quickly convert and adequately apply the peacetime efforts for timely support thus forming a universal peacetime-wartime all-out defense security mechanism. This is to ensure the continued survival and development of the nation and the lives and properties of its people and a concrete actualization on the principle of an all-out defense.

The latest military strategies and operational readiness goals of the ROC Armed Forces are to establish concrete war-prevention capabilities and a clear declaration on the integration of the homeland security network concept and guidance in the future. We plan to establish all-round peacetime disaster relief and anti-terror functional capacities with acquisition of important equipment. Under the presumption of not affecting the armed forces' existing military training and warfighting duties, we will set an example of prompt disaster relief and care and protection of the people through high-efficiency responsiveness, grouping ability, mobility, and operability. Under the operational guidance of "strategic endurance but tactical expeditiousness," we will nullify the PRC's active armament expansion and its military deployment and exercises targeting Taiwan. We will prevent the PRC's attempts from using the three warfares (public opinion, psychological, and legal warfare), terrorist assaults, and military invasions against Taiwan. Gradually, we will establish our deterrence capabilities and determination for all-out defense so that enemies will be less likely to initiate war.

#### 2. Building a Comprehensive Civil-Military Defense Capability

In the early days, military strategies of the ROC Armed Forces focused on military operational readiness planning. However, to address the threat of "unrestricted attack" from the PLA, the ROC Armed Forces will adjust the peacetime readiness and operational contingency measures to be used for disaster (pandemic outbreaks) prevention and response, search and rescue, counter-terrorism and

contingency response and security maintenance of Taiwan's critical economic infrastructure. We will seek to build a comprehensive readiness and contingency support system based on the Planning, Programming and Budgeting System (PPBS) within legal restrictions and jurisdictional boundaries.

The PLA has been



△ The jurisdiction of the ROC Armed Forces' in "crisis management" includes counter terrorism attacks



actively modernizing its military in recent years and their threat to the national security of Taiwan has shifted from the traditional land-based operation to the development of force deployment in the "6-Dimensional" high-tech warfighting scenarios involving underwater, sea, air, aerospace, electromagnetic and network. Also, taken into account in the military exercise is the prevention of external intervention in the Taiwan Strait. Their concept of "winning a campaign in a remote area quickly, and winning the first campaign decisively" is intended to accelerate and enhance the acquisition and deployment of their long-range strike weapon systems for the Navy, Air Force and Second Artillery. Through continuous combined arms operational training and joint exercises, the PLA wishes to accumulate experience and elevate its capacity in joint warfighting.

The developments of our defense ability are based on the principle of fusing the civilian and military to strengthen our national defense, protect our country and the people. All of our construction efforts focus upon national defense. Likewise, all military facilities are intended to protect the civilian way of life. In other words, the buildup efforts have their civilian functions in peacetime, but must deliver their defensive features in wartime. Only by fusing both elements of civilian and the military can we facilitate the true fusion of the people and defense abilities. Under the principle of "preventing war but not be afraid of war, preparing for war but not provoking war," we currently staged our combat abilities within the civilian population during peacetime to develop an all-out defense capability. In wartime, civilian powers will be quickly mobilized to engage in military combat. This type of military-civilian fusion is precisely the all-out defense concept that we are actively promoting today and the major factor in protecting our national security and providing stability in the Taiwan Strait.

#### 3. Perfecting Crisis Management Mechanisms to Sustain Government Operations

Categories of the ROC Armed Forces' "crisis management" operations include the "military crisis," domestic terrorist attacks and support operations for various types of disasters. Therefore, the MND will continue its cooperation with the national crisis prevention and response mechanisms in accordance with the "security on all fronts" principle. The MND will also be perfecting the crisis prevention and crisis management mechanism based on "national security policy," and establishing defensive powers to counter "asymmetric" threats. Moreover, it will underscore close military-civilian cooperation with a pragmatic attitude and assist the government in utilizing the organizational powers of all-out mobilization. Furthermore, to refine crisis management mechanisms, the MND plans to establish an integrated national crisis management center covering the three areas, such as "disaster prevention," "counter-terrorism and contingency response," and "mobilization readiness," to address the various dangers and ensure homeland security.

The spectrum of war and the development of high-tech weapon systems resulted in the pos-

Adjusting Military Strategy

05



sibility of highly abrupt and unpredictable military crises. If the enemy takes "paramilitary operations" or adopts terrorist tactics derived from "unrestricted warfare," crisis management and control will become even more challenging. Therefore, when enemies demonstrate clear hostile intentions, or exhibit behaviors clearly indicative of invasion, the MND will immediately analyze the enemy situation and issue preparatory orders for upgrade of the defense readiness condition (DEFCON) and preliminary combat directives in response to enemy threats. The National Security Council (NSC) will subsequently be convened according to legal procedures and then the resolutions from the NSC will be followed and executed. The joint operations command and control center will conduct appropriate combat readiness operations or unified commanding procedures to execute defensive operation missions.

To address possible "conventional and unconventional," "linear and nonlinear," "symmetric and asymmetric" enemy measures to launch sudden attacks against Taiwan, the ROC Armed Forces have completed relevant operational readiness stage adjustments. We have clearly devised rules of engagements and operations plans based on the differences between peacetime and wartime missions. We take a "prudent to fight from beginning to end" approach and a "no war unless absolutely necessary" principle to devise operational readiness directives and diligently complete all combat preparation efforts to accomplish defensive operations.

#### 4. Active Research and Development in Defense Technologies

In response to the developing threats, the ROC Armed Forces focuses its force buildup efforts with an emphasis on "enhancing overall joint operation capabilities" based on the strategic

framework of "effective deterrence and resolute defense" and under the directives of "technology advancement, information and electronics superiority, joint interception, and homeland defense." With information and electronic warfare, missile defense systems and joint interception capability as the top priority, the ROC Armed Forces

he ROC stands by its commitment of "Five No's" policy: "No Development, No Production, No Acquisition, No Stockpile and No Deployment" regarding Nuclear, Biological and Chemical (NBC) weapons.

are aggressively constructing a highly effective modern military force to fulfill the overall defense needs.

In terms of defense technology research and development, the ROC Armed Forces will continue efforts in utilizing our experience and technology capacity in research and development of existing defense technology. We will continue critical scientific research programs to fulfill the operational requirements of the armed forces and enhance the overall warfighting capabilities. At the same time, we will establish logistic systems and autonomous capacities in manufacturing certain





key components, and secure key technologies to achieve the goal of defense autonomy.

In terms of development of dual use technology, we will cooperate with the Executive Yuan's "Industrial Innovative Research and Development Center Initiative" to improve channels of information exchange between defense technologies and the private sector and thus accelerate joint military and civilian research and development cooperation programs.

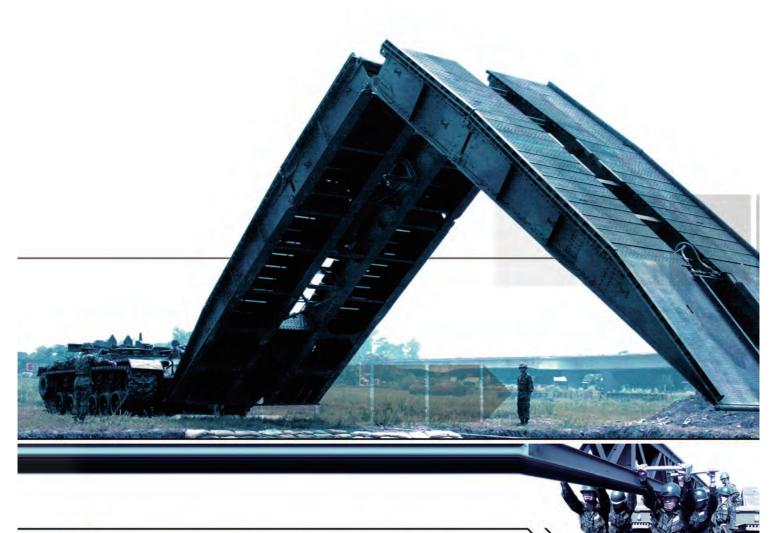
In terms of research and development for future weapon systems, we will focus on systematic and critical research and development of (in order of priority) information and electronic warfare, joint air defense, joint interception, and homeland defense. We will combine technology capacities from the private sector to achieve breakthroughs in bottlenecks for key technologies.

#### 5. Developing Regional Military Security Cooperation

Taiwan plays an important role in the Asia-Pacific region due to its geographical location and the common value of democracy, freedom and human rights. The PLA's military expansion is a common concern for all Asia-Pacific nations, and Taiwan stands on the front line to counter its threat. The military developments of the PLA in recent years are gearing toward the invasion of Taiwan, and the danger endured by Taiwan is also the threat to Asia-Pacific stability. Therefore, the ROC's national defense policy focuses on promoting military diplomacy and reinforcing participation in regional security and cooperation.

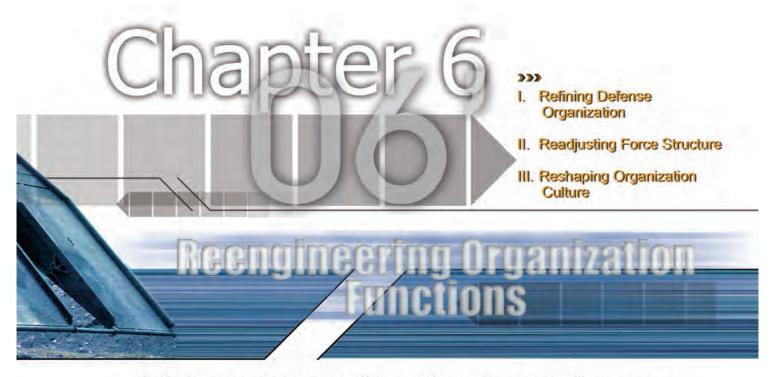
To expand regional military security cooperation, Taiwan will focus on enhancing strategic dialogue and security cooperation with nations that share common strategic interests. In the long run, we will strive to integrate regional powers to aid in the establishment of Confidence Building Measures (CBM) over the Taiwan Strait. In collaboration with the Ministry of Foreign Affairs' policy of "Comprehensive Diplomacy," we shall also continue to promote exchange and cooperation with other nations' militaries to increase our international exposure and attain strategic military alliances so as to broaden our military intelligence warning channels, prevent conflicts and minimize outbreaks of war.

In order that a steady relationship of exchange and cooperation may continue to develop between our nation and other nation's militaries, and that the efficacy of cooperation for the parties involved may be enhanced, the MND shall gradually increase the level of exchange and enlarge the scope of cooperation through visits, inspections, seminars and other means. Based on a foundation of "mutual trust and benefit," the MND shall continue to integrate alliance strengths in the future, use relevant mechanisms as platforms for future security cooperation, establish standardized strategic dialogue and channels of security cooperation, and jointly solidify regional security and stability.





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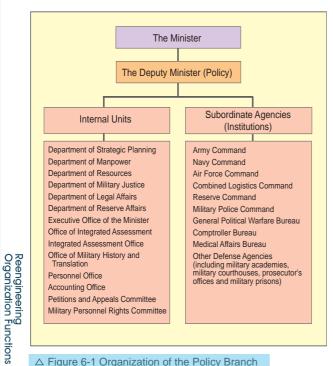
Swift changes in international affairs, continuous threat and military pressure from the PRC compounded with the increasing limited defense resources have placed the ROC Armed Forces at a critical "transformation" junction in this post-Cold War strategic environment. The most critical issue at present is how to manage the long-term military buildup and readiness tasks while creating visions for future development. Dealing with issues such as the surging suppression from the PLA, the transformation in the nature of threats, trends in RMA and the internal demand for continuous reform, the ROC Armed Forces must efficiently utilize all available defense resources and adopt every possible effective measure to develop a highly adaptive defense organization capable of meeting the operational requirements in modern warfare.

Careful assessment on the execution of the "Two Defense Acts" and the RMA philosophy has led the MND to establish guidance for defense organization realignment and force restructuring to integrate with future force buildup planning under the four principles of "Maintaining Combat Capabilities," "Continuous Operation," "Balance Development" and "Effective Integration." The continuous transformation effort will be executed through improving joint operations capabilities, streamlining command hierarchy, enhancing joint training exercises and aggressive promotion of the personnel recruitment system. This effort is further enhanced by reshaping the organization culture to promote personnel quality and strengthening defense policy execution capability. The overall defense transformation can only be achieved through building modernized, professional armed forces.

#### **I. Refining Defense Organization**



Since the promulgation of the Two Defense Acts on March 1st, 2002 (Refer to Appendix 6-1, Legislation and Amendments of the Two Defense Acts), a system of "civilian control of the military" and "consolidation of military policy and command branches" has been established within the defense organization of the ROC. A vital element to a democratic state, this system fully delivers the efficiency required for military professionalism and division of labors among the policy, armament and command branches. It's been over three years since the initial operation of this new system in February, 2003. After reviewing and examining the execution results, the MND realizes that the defense organization still requires further streamlining and adjustments to achieve the transformation goal. Therefore, further merging of organizations/units with similar functions is deemed necessary. Under the presumption of professionalism and functional integration, the organization reengineering efforts are gearing toward the guidance of the Policy Branch supporting the operations of the Command and Armament Branch, the Command Branch planning for joint operations requirements and perform force control while the Armament Branch supports the demands of the Policy Branch and Command Branch to build a defense organization with "uniformity between authorities and responsibilities" and "professionalism and division of labors."



#### 1. Policy Branch

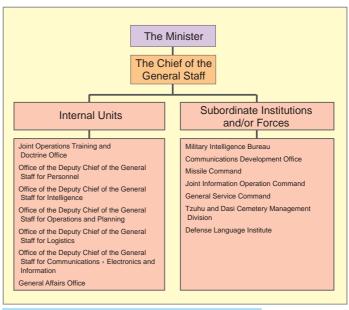
The responsibilities of the Policy Branch include planning and recommendation of defense policy, planning and execution of military strategies, budgeting and execution of the defense budget, force buildup and development, planning and execution of defense resources and manpower, defense laws and regulations, military laws and legal services, political warfare, reserve affairs, force integration and evaluation, military history and translation, defense education and the supervision, planning and execution of other related defense affairs.

Current internal units include Department

of Strategic Planning, Department of Manpower, Department of Resources, Department of Military Justice, (Department of Legal Affairs,) Department of Reserve Affairs, Executive Office of the Minister, Integrated Assessments Office, Inspection Office, Office of Military History and Translation, Personnel Office, Accounting Office, Petitions and Appeals Committee, and the Military Personnel Rights Committee. Subordinate agencies/institutions include Army Command, Navy Command, Air Force Command, Combined Logistics Command, Reserve Command, Military Police Command, General Political Warfare Bureau, Comptroller Bureau, Medical Affairs Bureau, and other defense agencies, etc. (including military academies, military courthouses, prosecutor's offices and military prisons). (Refer to Figure 6-1, Organization of the Policy Branch)

#### 2. Command Branch

Under the command of the Chief of the General Staff, the function of the Command Branch is to act as the military adviser for the Minister of National Defense and the command mechanism for joint operations. Its missions include but are not limited to the submission of military buildup and preparedness requirements, recommending allocation of defense resources, supervising efforts in combat readiness, force



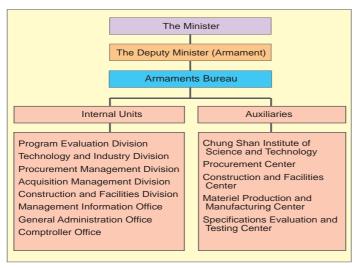
△ Figure 6-2 Organization of the Command Branch

training, regulating order of battle, directing and executing operations planning and other force command matters and transforming to joint operations command mechanism in times of war.

Internal units include the Joint Operations, Training and Doctrine Office, Office of the Deputy Chief of the General Staff for Personnel, Office of the Deputy Chief of the General Staff for Intelligence, Office of the Deputy Chief of the General Staff for Operations and Planning, Office of the Deputy Chief of the General Staff for Logistics, Office of the Deputy Chief of the General Staff for Communications, Electronics and Information and the Office of General Affairs. Subordinate agencies/institutions/forces include Military Intelligence Bureau, Communications Development Office, Missile Command, Information and Electronic Warfare Command, General Service Command, Tzuhu and Dasi Cemetery Management Division and Defense Language Institute. (Refer to Figure 6-2, Organization of the Command Branch)

#### 3. Armament Branch

Under the supervision of the Deputy Minister for Armament, the mission of the Armament Branch is to act as the armament staff for the Minister of National Defense. Its missions include the



△ Figure 6-3 Organization of the Armament Branch

planning and recommendation of the following: management of weapons systems acquisition policy, defense technology industrial cooperation and development, military-civilian transferable technology interchange, armaments collaboration and cooperation, integrated logistics support, military construction procurements and properties management, etc. The Armament Branch provides decision, consultation

and review regarding armament matters to support the demands and requirements of the Policy and Command branches.

The main body of the Armament Branch will be the Armaments Bureau with internal units of Program Evaluation Division, Technology and Industry Division, Acquisition Management Division, Construction and Facilities Division, Management Information Division, General Administration Office, and Comptroller Office. Auxiliary institutions include the Chung Shan Institute of Science and Technology, Procurement Center, Construction and Facilities Center, Materiel Production and Manufacturing Center and Specification Evaluation and Testing Center. (Refer to Figure 6-3, Organization of the Armament Branch)

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#### **II. Readjusting Force Structure**

Reengineering Organization Fundation

Military strategy, military buildup and combat readiness planning of the ROC Armed Forces are continuous adjustment and realignment efforts. Evolving synchronously with the progress in time and revising accordingly with changes in military thinking and strategy, the plan to construct a desired force structure, weaponry and equipment has been properly executed in accordance with the "Planning, Programming and Budgeting System." However, actual combat capabilities can not

Bhapter (

be realized instantly due to the lingering of process and scheduling in defense budgeting, doctrine, training and education, combat readiness and acquisition. Thus measures taken by the ROC Armed Forces in areas of military thinking, organization structure, personnel quality, training and education, equipment acquisition and operations and training readiness must be innovative and flexible enough to adapt to the changes in the overall environment.

Based on the planning of Phase II, Jingjin Program, the force restructure planning efforts must integrate with the specific operational requirements of the Island's geological environment. Each service is to maintain the existing combined arms brigade, flotilla and combatant wing baseline structure. Command hierarchies were adjusted through merging or deactivation of units based on mission, functionalities and responsibilities. Non-military tasks were eliminated to dedicate troops to combat and training missions. Priority is on the fulfillment of combat units personnel needs while administrative tasks must be carried out using minimum manpower. Service headquarters are no longer in charge of commanding combat responsibilities. The organizational structure of individual service headquarters was reexamined and simplified to flatten the command and operational hierarchy. In March 2006, based on the regulation of the Two Defense Acts, Service General Headquarters have been adjusted to Service Commands in charge of force development, training, manpower, readiness and logistics. Further adjustments have also been tailored in the logistics system, political warfare organization, military academies and military legal system. Adjustments for individual services and major systems are stated as follows:

## 1. Army

Stationed near and safeguarding key locations in Taiwan and islets, the peacetime mission of the Army is focused on the formation of basic combat capabilities and readiness for contingency operations including protection of critical infrastructure bases, facilities and depots, supporting antiterrorism operations and supporting major disaster relief efforts in their area of responsibility (AOR). In wartime, the Army will be a component of the joint operations effort teaming with the Navy and the Air Force in defeating invading forces and ensuring the security of the nation.

Based on its mission, the goal to build a "digitized, three-dimensional and mechanized" army is achieved through streamlining high level commands, simplification of command hierarchy, integration of doctrine and training systems and integrated logistics support. Furthermore, assessment of the organization of staff units, force structure and the doctrine and logistics system has been conducted on continuous bases to strengthening the efficiency and effectiveness in overall combat capabilities. The direction for transformation and development is toward special and joint operations aiming to build a professional force capable of conducting disaster relief in peacetime and military operations in time of war.



#### △ Figure 6-4 Adjusted Organization of the Army

At the end of the force restructuring efforts, the Army commands will include the following units: Corp Command (3), Defense Command (4), Aviation and Special Force Command, Education, Training and Doctrine Development Command and direct subordinate units. (Refer to Figure 6-4, Adjusted Organization of the Army)

#### 2. Navy

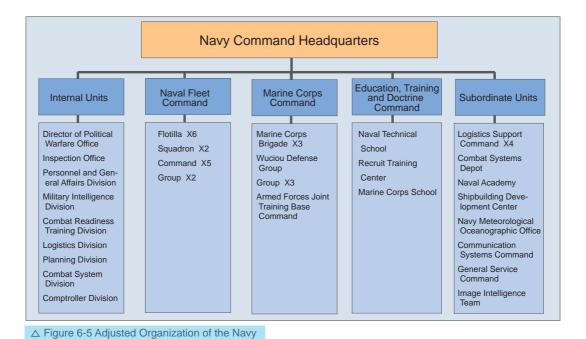
Navy's peacetime operations calls for continuous strengthening of combat readiness, refining operational training, conducting maritime patrols in Taiwan Strait, ensuring the security of sovereign waters and timely support of major disaster relief efforts. In war time, Navy will conduct counterstrike operations with the joint forces and deter any enemy maritime blockade or military invasion in an effort to secure the sea lanes of communication (SLOCs) around the nation and in turn, our national security.

To achieve the goal of building a highly effective elite force capable of performing fast deployment and long range strike, the organizational restructuring of the Navy is conducted through study and formation of staff units and methods of force restructuring. This is to achieve the planning goals of force construction, deployment support, restructuring and full transformation of the Navy.

At the end of the force restructuring efforts, Navy units will include Fleet Command, Marine Corps Command, Education, Training and Doctrine Development Command and several direct sub-

Reengineering
Organization Functions

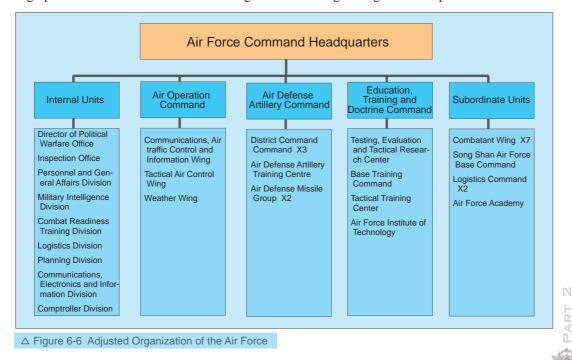
Chapter 6



ordinate units. (Refer to Figure 6-5, Adjusted Organization of the Navy)

#### 3. Air Force

Air Force peacetime missions including patrolling and securing the national airspace, enhancing operational readiness and force training efforts in strengthening combat capabilities and combat





readiness. Air Force also provides timely support to various major disaster relief efforts. During wartime, the Air Force will endeavor in seizing air superiority and coordinate with the Army and the Navy to execute various joint operations. By effectively unleashing its full combat capabilities, the Air Force shall defeat the invading enemy and ensure the security of the homeland.

To achieve the goal of building a military service capable of conducting early warning, enemy assault prevention and long range precision strike, the organizational restructuring effort of the Air Force concentrates on fulfilling warfighting capabilities of the fighter wings while ensuring the operations and safety of combat support missions to achieve the overall planning, design and officer/solder ratio of the Jingjin Program.

At the completion of the force restructuring, the Air Force will consists of operation Air Command, Air Defense Artillery Command, Education, Training and Doctrine Development Command and subordinate units.(Refer to Figure 6-6, Adjusted Organization of the Air Force)

#### 4. Combined Logistics Command

The Combined Logistics Command is responsible for the general logistics support to all levels of the ROC Armed Forces including generic supplies, fuel, munitions, ground equipment maintenance, transportation, and medical supplies; also included is the supply and distribution of spare parts for service specific equipments. Its mission also calls for timely support for major disasters relief.

To build a force capable of enterprise management, proactive services, IT-driven operations, the force restructuring efforts of the Combined Logistics Command shall be based on the strengthening

**Combined Logistics Command** Internal Units Subordinate Units Т Director of Political Warfare Office District Support Command X7 Inspection Office Logistics School Personnel and General Affairs Division Military Maintenance Center Logistics Planning Division Base service depot X3 Logistics Management Division General Accessory Warehouse Comptroller Division General Storage Warehouse Communications, Electronics and Information Division Image Database Service Battalions Procurement Division Military Intelligence Division Supply division Maintenance division Transportation division Medical Affairs Division

of the integrated logistics system and establish separate customized logistics systems for military buildup and application. Efforts should be made to integrate, merge and streamline the existing armed forces logistics organization, setup information systems and support capacity to enforce command, management and decision support capabilities to establish a precise, swift and effective logistics management mechanism in order to support joint operations.

△ Figure 6-7 Adjusted Organization of the Combined Logistics Command

Reengineering Organization Functions

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#### 5. Reserve Command

Peacetime missions of the reserves include handling level 1 training missions for new recruits and mobilization preparations. In wartime, the reserves are charged with defending the first line of defense along the coastlines, urban areas and depth of defense of all area command and outposts on hills and mountains.

To build a reserve force capable of conducting "timely, on-site mobilization and combat," the organizational restructuring will be carried out under the directive of "regular for strike and reserves for secure." The Reserve Command will be responsible for reserve mobilization, training, recruitment, and retaining missions. Organizational and military structural adjustments will focus on employing separate mobilization for coastal defense troops. All headquarter staff agencies and reserve troop formations will also be restructured.

After restructuring, there will be District Reserve Command (3), County (City) Reserve Command (21), recruit brigade for coastal defense (7), urban defense brigade (21), reserve troops training center (3), reinforcement battalion (4), coastal defense battalion (9), reserve service centers, headquarters company (2), Communications Operations company, medical dispensary and the Re-

serve Mobilization School. (Refer to Figure 6-8, Adjusted Organization of the Reserve Command)

#### 6. Military Police Command

Military police perform special security duties, anti-terror operations, garrison security, law and order operations, support military operations, and execute military justice and law enforcement missions. They assist in maintaining public security, adequately support regional disaster prevention and response, and ensure social stabil-



△ Figure 6-8 Adjusted Organization of the Reserve Command



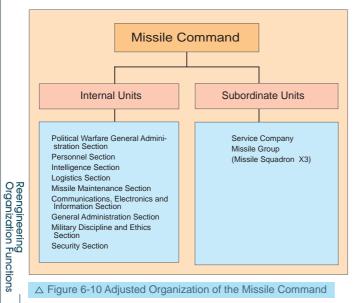
△ Figure 6-9 Adjusted Organization of the Military Police Command

ity and national security.

The goal of the force reconstruction of the Military Police Command is to build a force capable of garrison and specialized missions, maintain military discipline, and support military operations. Considering factors such as enemy threat and military buildup resources, etc, the restructuring efforts will focus on missions of military police in the capital of Taipei and individual area commands based on the RMA principles. The goal is to build a multi-functional military

police force capable of anti-air assault, anti-kidnapping, anti-sabotage, anti-terrorism, urban warfare, intelligence gathering, and forensic investigation capabilities by 2008 in conjunction with a reduction in force and enhancement in combat capabilities.

After restructuring, the Military Police Command will consist of 4 Commands, 22 Regional Military Police units, 28 Military Police battalions, 6 direct military police companies and the Military Police School. (Refer to Figure 6-9, Adjusted Organization of the Military Police Command)



#### 7. Missile Command

Under the unified command of the ROC Joint Operation Command Center (JOCC), the Missile Command will utilize its combat capabilities to secure strategically favorable timing and positions and create advantageous postures for the defense and security of Taiwan and the offshore islands.

The goal of the force buildup efforts is to construct a missile force capable of joint missile defense and joint interception missions. The organizational restructuring will focus on completing the command transformation and reassignment of subordinate units without any gaps in combat capabilities or jeopardizing in mission continuity.

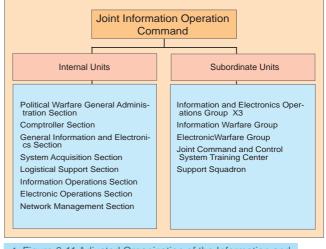
After restructuring, the Missile Command's air defense missile forces will be reassigned to the Air Force's Air Defense Artillery Command. The Hsiung-Feng group will be reassigned under the Navy, and the Missile Command will be directed under the General Staff, where they will continue developing special missile combat capabilities. (Refer to Figure 6-10, Adjusted Organization of the Missile Command)

#### 8. Information and Electronic Warfare Command

The peacetime missions for the Information and Electronic Warfare Command includes security protection and monitoring for command and control systems, all-weather, comprehensive, highly effective, high quality and highly reliable communications, information support missions and timely support of major regional disaster prevention and response missions. In wartime, the Information and Electronic Warfare Command will conduct effective electronic warfare support and protection to prevent enemy infiltration, sabotage, lockdowns, or espionage of our networks. Missions also includes pursuit of information and electronic superiority and integration into the major combat forces in support of the overall mission.

The goal of the force reconstruction efforts is to build a force capable of conducting leading basic infrastructure, advanced command, control and information systems with flexible information and electronic warfare capabilities. The organizational adjustments will focus on building professional electronic and information warfare forces in coordination with the overall force transformation to enhance command and control efficiency. To fulfill the MND's information warfare guide-

lines for "put priority on protective measures; fast response for dominance," the Information and Electronics Command will employ active monitoring and aggressive defense measures to vigorously develop early warning and response capabilities for defending communications and information security. In consideration of the style of future warfare and joint operations requirements, MND will continue improving digital communications, command, and control plat-



△ Figure 6-11 Adjusted Organization of the Information and Electronic Warfare Command



forms, and pushing for electronic warfare readiness. The Information and Electronics Command will manage the electromagnetic spectrum effectively according to the guidance of the Overall Planning for Military Electronic Warfare Capability of the ROC Armed Forces with a goal to establish both offensive and defensive electronic warfare capabilities.

After restructuring, the Electronic Warfare Command will integrate its traditional communications capacity with the Army's area commands, and incorporate the electronic warfare battalion from the Army, forming three information and electronic operations divisions, information warfare divisions, electronic warfare division, joint command and control training center, and support squadrons. (Refer to Figure 6-11, Adjusted Organization of the Information and Electronic Warfare Command)

### 9. Major System Restructuring

#### (1) Logistics System

The Combined Logistics Command will centralize all logistics responsibilities and functions from the logistics commands of the three individual services. The Combined Logistics Command will be in charge of handling generic logistics supply, maintenance, readiness support and resource coordination for the armed forces and assume responsibility for the Armed Forces' equipment maintenance, spare parts and accessory supply and allocation. All military services will maintain a single logistical staff agency handling the supervision, coordination, and control and management of specialized and force logistics pertaining to each individual services.

To improve the logistics command and control mechanism and integrating support functions, the Combined Logistics Command will establish a comprehensive chain of command for logistics from the MND, area commands, fleet commands, air operation command, combined arms brigades to the battalions based on the joint operations command mechanism.

#### (2) Political Warfare System

The General Political Warfare Bureau will be adjusted to the Political Warfare Bureau according to the amendment schedule of the draft Organization Act of the General Political Warfare Bureau of the Ministry of National Defense. In the meantime, the security department within the General Political Warfare Bureau will be reassigned to various levels within the intelligence system according to principles of streamlining organizations with overlapping responsibilities and similar functions. The Military Dependants Service Division will be reassigned to the Armaments Bureau based on Phase II of the Jingjin program and according to the schedule and progress of the military dependants service reforms.

Units and functions will be removed from the political system including the non-staple food supply service which will be reassigned from the General Benefits Division to the Deputy Chiefs of the General Staff for Logistics and benefit affairs will be managed by trust funds due to the needs of

our troops, veteran and their dependents. The Military Dependent Service Divisions with the MND and individual services will cease to function according to the phase 2 of the Jingjin program schedule. Part of the personnel from the Military Dependent Service Division will be reassigned to the General Political Warfare Administration Division to continue providing services for military dependents.

Enhancements of the political warfare functions will be executed mainly in the area commands. MND will maintain routine civil bulletins through local governments and the private sector, and integrate political warfare capacities within the area commands to support military missions. Two additional tactical psychological warfare squadrons will be installed and utilized in various area commands; the two units will assist in effectively countering the public opinion, psychological and legal warfare from the PRC.

After restructuring, political warfare missions will focus on psychological warfare, publications, and serving our citizens externally while enhancing psychological counseling, psychological warfare training, military news and nurturing mental combat capabilities for military personnel. The goal is to strengthen ourselves and overcome the enemy.

#### (3) Military Academy Systems

Through the principles of "concentrating education resources, integrating elite instructors, streamlining academic (administrative) hierarchies, streamlining operating procedures, and improving instructional content," the MND will consider the development of military education, utilize integration and share instructors and education resources to create a positive education environment. MND will analyze the nature of the basic, advanced and higher level education classes, assess the organizational functions and educational goals of military academies to execute the merging of the military academies. The Fu Hsing Kang College will be consolidated into the National Defense University. Undergraduate, masters and doctorate programs within the Chung Cheng Institute of Technology, National Defense Management College, and the Fu Hsing Kang College will be consolidated into professional research and military academies. The National Defense Medical Center will be restored as an independent academy and be directly under the command of the Defense Medical Affairs Bureau. The goal is to develop professional leadership personnel in fields of command staff, strategy, tactics, defense management, technology, medicine, and sociology, etc.

The Military Education Regulations will be amended accordingly with the adjustments of military academies in the northern region. Existing preparatory schools and military academies will be included in the amendments of the Organization Act of the Ministry of National Defense for legislative purpose.

#### (4) Military Legal Systems and Prisons

The institution of the current military courts, prosecutor's office of the military courts and mili-



tary prisons are based on the Military Justice Law, which is incompatible with Organization Act of the Central Government Agencies. Therefore, military courts are planned to be adjusted into a two level system consists of regional and high courts in conjunction with the reform of the judicial system. The Organization Act of the Ministry of National Defense and Military Justice Law will be amended at the same time to provide judicial bases for all levels of military prosecutor's offices and correctional agencies.

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## **III. Reshaping Organization Culture**

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The purpose of reshaping the organization culture is to cultivate a common understanding and recognition of core values among all military personnel through consensus and vision building. The expected result is to effectively achieve the defense goals through this joint effort. In recent years, the Armed Forces have been actively pushing for organizational re-engineering, with major reforms in troop formation, new weapon systems acquisitions and the establishment of joint operation concepts, making this the optimum time for reshaping the military culture of the ROC Armed Forces. The core values and beliefs of the ROC Armed Forces are founded on the principles of duty, honor and country. The common goal of the organization is to "fight for protecting the security of the nation and the well-being of the people" and "fight for ensuring the survival, development of the nation, democracy, freedom and human rights." To integrate the trends and changes of the modern society and the directions for current organizational reengineering and developments, the ROC Armed Forces will continue advancing the traditions of unity, discipline, and obedience. The ROC Armed Forces will also endeavor to promote "people-centric" and "knowledge-driven" as the central values of the organizational culture reshaping efforts, so that the Armed Forces can reform into an innovative, responsive, caring, open, professional, and effective modern military to respond to the challenges of this era.

## 1. People-Centric

Building a modern professional military requires excellent military technology and effective management, elite defense personnel and innovative operational concepts. More importantly, the military should apply the people-centric core value in the policy planning and execution of training, exercises, combat readiness and garrison management to harness cooperation, enhance morale among our troops and enhance psychological power. The goal is to develop professional and ethical military personnel.

inization Function





 $\triangle$  A people-centric organizational culture will shape the ROC Armed Forces into a highly capable, professional but ethical modern military.

A humanitarian organization bases its beliefs in the kindness, potential, rationality and freedom of will in each and every individual. It challenges group members to rethink personal values and ideas through care and respect from instinct. It encourages team members to incorporate organizational, team and personal objectives and encourages autonomous innovation and contribution and jointly achieves organizational visions and objectives.

Military life style centers on group activities; the leadership style of the organization needs to be based on the caring human spirit and to analyze the vertical and horizontal interconnections among group members and external entities through humanistic, psychological, and social perspectives. This will facilitate the pursuit of organizational visions, enhance group cooperation and organizational management efficiency. For example, when a commander truly cares about his/her troops and their families, the subordinates tend to value their relationship with the organization. When commanders listen to the voices of his/her subordinates, they will also become more loyal to their units. Caring and respectful agencies will have staffs that will compensate the unit with high work commitments. Armed forces that interact earnestly with external societies will also help to maintain positive military-civilian interactions and trust. Summarily, leadership based on the humanistic spirit will help enhance the loyalty of the subordinates towards their superiors, troop's loyalty towards their units, and harnessing comradeship to create a more cooperative and trustworthy organizational

culture.

In recent years, the Armed Forces have taken concrete humanistic measures in troops management, including:

#### (1) Protecting the legal rights of military personnel

The enactment of the Armed Forces Garrison Internal Management Regulations provides leadership in basic units with a reference and rules of basic management procedures. We will continue implementing the functions of the Complaint System for Military Personnel and Military Personnel Rights Committee, and protect officers' and soldiers' rights through active measures. (Refer to 6-2, Implementation Status and Results of the Military Complaint System and Appendix 6-3, Administrative Implementation Status and Results of the MND Military Personnel Rights Committee)

#### (2)Promote mental health concept

To promote the concept of mental well being, we will assist officers and soldiers in adapting to military life, resolve psychological problems and prevent incidents of self-inflicting wounds or suicides. The MND set up seven Regional Mental Health Centers in northern, central, and southern Taiwan, and Huadong, Kinmen, Matzu, and Penghu. We will actively pursue comprehensive tri-level prevention and treatment systems and regional assistance networks to encourage healthy mental developments among our troops.

#### (3) Continue the "Three Assurance" Policy

The MND will continue executing its "Three Assurances" policy (assure safety for the soldiers, assure a steady life for the servicemen, and assure better living standards for military dependents) as major defense initiatives. We hope to increase morale and win approval from military dependents and our citizens through humanistic force management, maintaining military discipline and safety and the rights of military personnel, and continue enhancing our communications with and care for our military families.

#### 2. Knowledge-Driven

In the era of information technology and globalization, knowledge-based organizational management becomes the key factor for organizations utilizing non-physical assets to secure competitive advantages. The methods and styles of warfare in the information age also endure such impacts, creating new demands of different kinds of warfare and military management. At this junction of change, the Armed Forces need to establish an organizational culture and environmental conditions favorable for creating innovation, integration, application, learning, and knowledge sharing among group members, so that organizations can create and utilize the innovation, revolution, and adaptation capabilities of its members to respond to the rapid changing environment. Simultaneously, we will improve the Armed Forces' management efficiency in planning, decision-making, execution,

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and supervision of military readiness through emphasis and application of knowledge as a key aiding force for military reforms.

The mission characteristics and organizational functions of the ROC Armed Forces emphasize hierarchical restraints and authority in command and control and also require obedience and thorough execution of orders, regulations and disciplines. To avoid inefficient learning and rigid thinking in personnel due to this routine-based and authoritarian hierarchical characteristic, the ROC Armed Forces need to focus on organization and knowledge-based management functions. We need to enhance the efficiency of military innovations and applied knowledge through reshaping organizational culture in order to cultivate the flexibility needed when facing environmental changes. Concrete measures include:

## (1) Establish organizational knowledge databases and knowledge sharing platforms

To actualize knowledge-based management in the military, we will emphasize developing innovations in areas such as planning, decision-making, execution, and supervision, systematically analyze the timeliness and practicability of existing practices and concepts, and prevent

Summary of tri-level prevention and treatment for psychological well being (assistance)

Psychological consultation assistance provided by the ROC Armed Forces is based on the tri-level prevention and treatment framework, which is separated into Level-1 prevention (company and battalion chief counselor), Level-2 assistance (various levels of mental health centers), and Level-3 medication (all regional mental health centers), integrated with assistance resources to create supporting networks. The tri-level prevention and assistance system is as follow:

#### ©Level−1 prevention

Company and battalion chief counselors will handle emotionally unstable personnel, and assist in relieving psychological problems. Company—level commanders also need to direct the execution of mental assistance work in their units so that companies can exercise rapid detections and resolutions.

#### ○Level-2 assistance

Psychological counseling officers with professional mental assistance qualifications will assist in cases where no visible improvement after Level-1 prevention. They also provide adequate training to the knowledge and skill for unit officers; they also play a role in enhancing the operation of Level-1 prevention.

#### OLevel-3 medication

Cases with no visible improvements after treatment from company staffs and various levels of mental health centers will be procedurally moved to Regional Mental Health Centers in northern, central, and southern Taiwan, and Huadong, Jinmen, Matzu, and Penghu. Hospital medical resources and social support networks will be applied and integrated with frequent consultation to perform medication and mental reconstruction functions.

organization members from stagnating on given habits and experiences. We will also utilize modern information technology and management methods to create knowledge databases and knowledge sharing platforms for all units and individual professional domains. This will allow rapid flow of knowledge and create maximum overall value.

#### (2) Nurturing and properly utilize knowledge-based management personnel

Knowledge-based organizational management depends heavily on the nurturing of relevant talent to develop a knowledge-oriented career learning capacity, so as to maximize manpower efficiency. Currently, the ROC Armed Forces' personnel development plans include: improve private-sector recruitment mechanisms, introduce elite civilian officials, enhance military education, and create digital learning environments to raise the knowledge and professional quality of the armed forces staffs.

#### (3) Establish lifelong education standards for armed forces staffs

To create organizational culture favorable for knowledge-based management, the Armed Forces will establish a lifelong learning environment for staffs according to the Executive Yuan's Learning-based Government Action Plan and National Licensing Standard. We have enforced the Armed Forces Staffs Lifelong Learning Implementation Regulations, and required all units to pursue learning-based organization according to actual conditions and characteristics of the unit missions. This goal is to enhance learning capacity for staffs at all levels and encourage overall efficiency in military innovation and learning.

#### (4) Encourage knowledge and innovation in the organization

The ROC Armed Forces will encourage organizational and personal learning through officer training groups within various agencies, establish brainstorming, group discussions, and objectionallowed models of decision-making. This is to actively create an organizational culture favorable for creating knowledge and innovation to build a foundation and capacity for learning-based organization. We will replace authoritative obedience with professional leadership, and self-centric mentality with systematic thinking, and create organizational efficiency through group cooperation to lead the Armed Forces into a new era of military readiness.







Facing military threats from the enemy, changes in both internal and external political and economic environments, and problems and challenges accompanied with our defense transformation and organizational restructuring, the MND understands that effective allocation and application of defense manpower is the key to-successful buildup and preparedness in the ROC Armed Forces. Therefore, demand for and improvements in high quality personnel are significant in defense transformation. Talented personnel are the foundation of military buildup. In order to improve personnel quality, the MND will continue to maintain strict existing assessment and screening processes of human resource management. In addition, the MND will amend existing regulations, promote military service system reforms such as combining enlistment and conscription systems, improve military education and schools adjustment planning, and foster civilian defense officials and visions for civil-military cooperation.

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## **I. Transforming the Recruitment System**



In response to the nation's political and economic changes, public expectations and the Executive Yuan's plans to reform the military service system, lower unemployment and a shortened waiting period for military duty, the MND has, under the guidance of the defense transformation policy, amended relevant military service laws. This is so that the national military service system will develop towards a combination of enlistment and conscription systems with "the main force based on enlisted." In order that high quality and long-term service personnel will become primary source of future base-level troops, volunteer recruitment processes, promotional standards adjustments and appropriate shortening of mandatory service time are under consideration. In the future, for the manpower demand framework, we will consider gradually increasing the proportion of enlisted personnel in coordination with the adjusted mandatory service period. We will also gradually innovate the military service system and improve manpower quality according to adjustment planning of total personnel numbers.





△ Having female enlisted personnel conforms to mainstream gender and feminine labor development principles

### 1. Legal Issues

## (1) Promote a Combination of Enlistment and Conscription Systems

In the past, Taiwan primarily adopted the conscription system. In response to defense transformation and public opinion, and pursuant to the Executive Yuan's 4-year medium-term policy project (2005 to 2008), the MND is promoting military service reforms in the direction of "volunteer-oriented" enlistment and conscription combination systems, in the hope that by 2008 the volunteer force will reach 60% whilst the other 40% will be conscripted.

## (2) Amend Relevant Military Service Regulations

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To promote military service reforms, the MND has consulted with various Executive Yuan agencies, regional military service affairs representatives and domestic experts. As a result, Articles 47 and 48 of the "Act of Military Service System" and certain articles of the "Act of Military Service for Volunteer Enlisted Men" were amended. These regulations were enacted by the Legislative Yuan in November, 2005 and ratified by the President on December 14, 2005. They allow senior secondary school and vocational high school graduates to apply for volunteer military service in the year of graduation (i.e. at 18 years old). Also, in order to conform to mainstream gender equality principles and to develop and utilize female manpower, references to female volunteers have now been legally stipulated to expand enlisted personnel recruitment channels and undertakings.

#### 2. Administrative Issues

### (1) Expand Recruitment of Professional Enlisted Personnel and Reserve Non-Commissioned Officers

To professionalize the military and its personnel by streamlining troop manpower and continually upgrading weapons and equipments, and pursuant to the planned schedule of the Jingjin Program, the MND is considering expanding recruitment of professional enlisted personnel and reserve non-commissioned officers. The entire project has been started since 2004 and will be completed by 2008. It is separated into three phases: "reduce personnel establishment, personnel readjustments according to the payroll," "expand recruitment, promote transformation," and "enlistsed first, conscripts second."

#### (2) Restructure Non-Commissioned Officer System

To expand the number of professional enlisted personnel and raise the quality of non-commissioned officers, the MND is gradually adjusting to a system where selection and promotion of volunteer non-commissioned officers are selected from professional enlisted personnel to enhance troop organizational efficiency and utilize base-level combat capability. In the future, distinguished enlisted personnel who have passed the assessments will be promoted. (Refer to Appendix 7-1, Procedure of Promoting Competent Enlisted Personnel to Non-Commissioned Officers)

#### (3) Review and Shorten Mandatory Service Term

The current legal mandatory service period (reserve officer, NCO and regular enlists) is 22 months. Once the MND completes Phase 2 organizational framework adjustments of the Jingjin Program, the total personnel number in the ROC Armed Forces will be reduced. The push for a comprehensive recruitment of professional enlisted personnel will allow long-term volunteer manpower to fulfill medium and high level skill demands for base-level troops and retain overall combat readiness. After the MND appropriately assesses the current status of volunteer recruitment, planned schedules, national finances, and other objective and subjective factors, it will review the mandatory





service period annually. From January 1, 2006, service time has been reduced to 16 months. Also, maximum mandatory service age is planned to be lowered from 40 to 35 to reduce the size of reserve forces.

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## **II. Enhancing Military Education**



National military education has to meet the needs of defense transformation and challenges from overall environmental changes. A comprehensive education system has to be planned under the guidance of military strategy and Ministry of Education policies. For this system to operate effectively, we should actualize military education concepts and set precise educational goals and emphases. Through military education renovation and curriculum improvement, the Armed Forces' objective for military buildup and readiness will then be achieved.

#### 1. Military Education System and Concepts

#### (1) Education System

The current military education system consists of the 3 levels of "basic education," "intermediate education" and "advanced education" levels, with separate education for military officers, non-commissioned officers and enlisted personnel. It has been comprehensively planned and established in accordance with the Act of Military Education and other relevant statutes.

In the education for officers component: "Basic education" consists of credit-based curricula that are compatible with the University Act, and electives and morale cultivation courses required for junior officers. "Intermediate education" primarily consists of branch school special courses, regular courses and professional skill training courses, complemented by civilian professional training courses. "Advanced education" consists primarily of curricula from War College, Command & Staff College and various graduate schools of the National Defense University, complemented by masters and doctorate programs in the civilian sector.

In the education for non-commissioned officers component: "Basic education" consists primarily of electives and morale cultivation courses, complemented by basic technical certificates. "Intermediate education" consists primarily of branch school non-commissioned officer (NCO) courses, complemented by intermediate technical certificates and professional skill training in the civilian sector. "Advanced education" consists primarily of the master sergeant/chief course, complemented by advanced technical certificates and bachelor degree programs in the civilian sector.

The enlisted component consists primarily of recruit and skill training, and the soldiers enlists

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become qualified NCO nominees through step-by-step individual plans.

#### (2) Educational concept

Overall, military education is based on the Armed Forces' mission of military buildup and is combined with the future 10-year military buildup concepts, 5-year defense force programming plan and military education objectives. It responds to the needs of military buildup and continues to focus on the "military ethics and skills" of servicemen as its content with emphases on "philosophy, science and art of war." By cultivating a professional staff that is determined, competent and practical, we hope to build a modernized military with quality, adequacy and capability to ensure national security.

Also, military education needs to comply with the troop improvement policies of the Jingjin Program. It needs to seek improvements and innovation through streamlining academy structures, adjusting curriculum design, improving instructor quality and maximizing utilization of educational resources. We will also adequately enforce discipline in the education system in accordance with annual education policy guidelines and assessments of existing shortcomings to improve the quality and maximize the benefits of education.

## 2. Objectives and Emphases of Military Education

#### (1) Education Objective







△ Military education will continue to focus on the military ethics and skills of servicemen as its content with emphases on philosophy, science and art of war





In education for officers, "basic education" aims to cultivate new junior officers of all services. "Intermediate education" aims to train O2-O4 levels commanders, staffs and professional cadres. "Advanced education" aims to foster O5 and above levels commanders, staffs, strategy planner and military science instructors, including general/flag officers.

Education for non-commissioned officers includes "basic education" for eligible enlists in branch school so as to ensure that students become a civically, militarily, ethically, and tactically proficient military staff. "Intermediate education," which comes after completion of basic education and starter-level assignments, aims to cultivate professional leaders or technicians. "Advanced education" aims to further cultivate NCOs after intermediate education to have the professional knowledge and skills required for a fine master sergeant/chief, and complemented by the MND's lifelong learning education program.

#### (2) Education Emphases

Spiritual education involves enhancing patriotism, in-depth studies on philosophies of war, consolidating willpower and promoting military ethics to foster resolve. It also ensures that spirit is emphasized more than physical assets, and that morale, tactics and skills are emphasized more than weapons and equipment. "Law of Armed conflict" education involves integrating relevant education promotions of the Red Cross and incorporating "armed conflict methods" into general knowledge education. This is so that all officers and cadets will be equipped with the correct war concept and molded by an image of justice's representative who shall counter attacks waged by the PRC's "legal warfare" and seize to gain an upper hand on the legal front. Life education involves training for military figure and conduct, and developing the character befitting of modern military servicemen. Physical training involves attaining physical fitness, improving courage and confidence, and cultivating military dignity as well as mental and physical endurance. Academic education involves completion of credit-based classes required by the Ministry of Education, complemented by military academic subjects. Through this the cadets will become familiar with command management and staffing process, develop high-tech intellect, improve in strategic and tactical competence and be molded into professional military servicemen.

## 3. Evaluation of Military Education and Reform of Non-Commissioned Officer Systems

To enhance military education achievement and foster personnel with high proficiency, the MND is undertaking special education assessment measures and renovating the education system for non-commissioned officers. Concrete measures include:

#### (1) Basic Education Evaluation

Through objective evaluation schemes, the academies can evaluate their own education perfor-

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mance and officers' personalities to establish a mechanism for self-improvement and strive to improve strategy and achieve the education objectives of military academies.

#### (2) Transformation of Army High Schools

To improve the quality of the Army's regular non-commissioned officers and fulfill military buildup needs, Army high schools were converted into vocational colleges on-site starting from August 1, 2005, following an approval letter from the Ministry of Education on February 4, 2005.

### 4. Renovation of Military Education and Curriculum

In MND's overall planning and renovation of military education, existing foundations will be preserved. In the future, curriculum improvement planning will be driven in collaboration with the academy's mission and vision. Objectives and contents for all types of curricula will also be clearly set out.



△ Military education courses address both professional and general knowledge

Basic education involves separating curricula into core courses and professional courses so as to include both professional and general knowledge. Curriculum design will continue to focus on linguistic, communication and management abilities to improve teaching, research and instructor quality. Also, through education evaluations, we will enhance civil-military interactions and consider integrating departments in various schools, adding courses with military characteristics, etc., to streamline organization and improve the quality of basic education and reserve NCO education.

Intermediate education is based on military occupational specialty training to set a foundation for professional skills required to carry on organic functions. Also, we will strive to improve the quality of military instructors, retain excellent faculty, improve professional training, integrate educational resources, develop C<sup>4</sup>ISR-related education and implement coordinated and joint operations courses. These efforts are made to fulfill military service needs, successfully streamline service branch schools and effectively utilize educational resources.

In accordance with common and professional courses and categories of specialization. Thereof, advanced education focuses on developing various strategic knowledge to fulfill military buildup



and combat readiness needs. For example, military strategy and international relations research institutes will focus on national security, defense policy, international relations and political-military gaming. War College curriculum will focus on courses such as national security, field campaign strategy, military (service) strategy, joint operations and Taiwan-Penghu defense operations. Staff College curriculum will focus on staffing, applied operation, joint operations, and national security affairs. Graduate schools in the Chung-cheng Institute of Technology, National Defense Management College and Fu Hsing Kang College will focus on developing high-level personnel specializing in military affairs, technology, management and political warfare to fulfill the needs for military buildup and combat readiness.

In terms of lifelong learning, we will continue to promote exchanges and cooperation with civilian schools, utilize civilian educational resources to the fullest, develop distance learning and improve staff members' work-related knowledge to enhance their specialized skill levels. We will also establish comprehensive lifelong military learning environments, focusing primarily on allowing officers to attain master degrees, and non-commissioned officers and cadets to attain technical certificates to further improve the overall quality of military personnel.

The curriculum improving plan is set according to the academy's visions and missions, and ensure that all curricula's objectives and contents are clearly set. Basic education entails both core courses and professional courses so as to encompass professional and general knowledge. Intermediate education is based on military occupational specialty training in order to set a foundation for professional skills required to carry on organic functions. Advanced education is based on common and specialized courses and channeled by specialties, it focuses on developments of various strategic knowledge to fulfill military buildup and combat readiness needs.

### 5. Plans for Streamlining Military Academies in Northern Taiwan

The MND's purpose for streamlining the military academies in northern Taiwan is to address future military education developments, improve educational quality and create positive education environments to cultivate elites required for military preparations. The MND has assembled the Military Academies Merging Committee for Northern Taiwan, and will implement reforms in three stages - "planning," "moving" and "assessing development" until September 1, 2006, the anticipated date of completion, to restructure the military education organization. (Refer to Appendix 7-2, Principles, Plans, and Campus Placements for Streamlining Military Academies in Northern Taiwan)

## **III. Fostering MND Civilian Officials**



To coordinate with changes in defense transformation and operational reforms and ensure civilian control of the military, the MND will, in accordance with the law, employ no less than one-third of registered staff members as civilian officials, actively develop civilian official system, develop their professional qualities, enhance military-civilian cooperation and improve communication capabilities. This allows civilian officials to catalyze and create conceptual innovations in national defense during transformation. Therefore, fostering defense civilian officials is also the armed forces' goal of improving education and training for competent personnel.

#### 1. Concept of Recruiting Civilian Officials

Civilian control of the military is an important principle for commanding and managing the armed forces in a democratic nation. The main implication is that civilian leaders are for devising national defense and military policies while military servicemen are to adopt military professionalism, perform military policies and obey civilian leadership without interfering in politics. Since the legislation of the National Defense Act and the Organization Act of the Ministry of National Defense (hereinafter referred to as the Two Defense Acts), the mechanism and operation of civilian control of the military has been confirmed, propelling Taiwan into defense transformation and ushering in an era of modernized defense institutions.

The use of defense civilian officials is to support civilian leadership of the military and establish a professional division of labor in the military. In this way, the innovation and revitalization of national defense affairs is benefited by implementing the employment, training, assessment, and promotional systems of defense civilian officials, and capitalizing on their independent thinking and viewpoints. The concepts of "civilian control of the military," "a nationalized military," "political neutrality" and "all-out defense" will thus follow through.

#### 2. Establishing Civilian Official System in the MND

#### (1) Current Status of the Civilian Officials

Since the passage of the Two Defense Acts, the MND and its subordinate agencies have set up 282 civilian posts, which are to be filled based on national tests and open selection processes. And up until June 2006, 184 persons have already been employed, filling over 65% of the vacancies. In the future, national tests and open selection processes will be continued to select quality talent. We will also apply for permits to establish a "special exam for MND civilian officials" to foster professional talents for national defense in the long term.



The MND shall create job groups and categories for the "National Defense Administration" and "National Defense Technology" with approval from the Ministry of Civil Service. In the future, persons with professional defense qualifications can be selected to fulfill the operational needs of national defense. (Refer to Appendix 7-3, Civilian Job Categories in the MND)

#### (3) Formulate Operational Mechanism for Defense Civilian Officials

To ensure smooth operation of civilian defense officials, yield expected benefits and thus ensure civilian control of the military and military-civilian cooperation, the MND is gradually formulating an operational model for defense civilian officials:

#### a.Personnel Establishment

In accordance with organizational adjustments of the Jingjin Program, we will designate civilian quota for each service agency. Other than the sizes required by the Organization Act of the Ministry of National Defense, the Armaments Bureau and the National Defense Medical Bureau will need to designate one-third of their staff as civilian positions so that there are 282 civilian positions in the MND.

#### b. Promotion

In accordance with the "Civil Servant Employment Act" and the "Civil Servant Promotion Act," we have formulated the "Internal Promotion Regulation for Civilian Personnel" to accommodate adjustments in the national defense civilian promotion system. This will stimulate the management of defense civilian officials' career planning and raise their morale.

#### c. Evaluation Process

In accordance with the "Merit Evaluation Act for Civil Servants," we have formulated the "Memorandum on the Evaluation of MND Civil Servant" and "Standards for Rewards and Discipline for MND Civil Servants" to accommodate evaluations and reward/discipline affairs and thus ensure accuracy, fairness and objectivity in disciplinary affairs.

#### d. Benefits and Rights

After the passage of the Two Defense Acts, the "Regulation on Non-managerial Secondary Government Officials Accepting Compensation for Managerial Duties" and "Regulation on the Management of Overtime Work for MND Civilian Personnel" were devised in 2004 to reward secondary non-managerial personnel bonuses and overtime work. Also, in accordance with the "Measures to Improve Civil Servants Vacation Policy in All Agencies under the Executive Yuan," there are now bonuses for overtime work during holidays, financial assistance for vacations, grants for onduty, and transportation as of 2005. At the same time, there are considerations for improvements and matters regarding other benefits and rights for civilian officials in order to stimulate morale in civilian officials and retain competent personnel.

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#### 3. Developing Professional Quality in National Defense

To foster long-tenure national defense civilian officials, pursuant to the relevant regulations in the "Civil Servant Training and Advanced Education Act" and "Implementation Plan for the Training and Advanced Education of Civil Servants in all Agencies and Schools under the Executive Yuan," the MND devised the "Memorandum on the Learning Process of the Training, Intermediate Education, and Lifelong Learning for MND Bureaucrats" and "Implementation Plan on Staff Operation Training for Military and Civilian Personnel of the Ministry of National Defense" which will be incorporated into relevant military training courses. Through various education and training programs, civilian officials entering the MND service can quickly familiarize themselves with MND affairs, enhance their professional competence and utilize their skills to the full.

#### 4. Forward-looking Civil-Military Cooperation

#### (1) Enhance communication, coordination and civil-military cooperation

To accommodate the cultural gap between military and civilian personnel, improve communi-

cation and coordination, and enhance the effectiveness of civil-military cooperation, the following operational model has been devised:

a. Job vacancies can be filled by either military officers or civilian officials. Executives and their deputies will be assigned in such an arrangement that if one



△ Under national defense transformation, civilian officials are commissioned to catalyze and create conceptual innovations in national defense

is a military officer, the other will be a civilian official, and vice versa to jointly promote denfense affairs.

- b. In organizational affairs, we will undertake team work to enhance coordinated military-civilian cooperation and reduce the period of conceptual civil-military conflicts.
- c. We will undertake mixed training of military and civilian officials with the hope of developing good communication, coordination and cooperation relationships during the learning process,



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thus creating a common conceptual organizational culture.

#### (2) Mindset of Defense Civilian Officials in the New Era

The realization of the so-called Two Defense Acts assumed the democratic national defense mechanism which is characterized by civilian control of the military and consolidation of military policy, command and armament branches. It authorizes the civil minister to integrate all capacities and assume all responsibilities. In addition, the design that civilian officials are introduced to participate in defense policy and defense affairs is expected to bring about innovative effects from multilateral perspectives. This allows the minister to have previsioned and all-round decision-making powers over national defense policies and resources so that he/she can effectively integrate military policy, command and armament branches and direct national defense policy implementations accordingly.

After the ROC Armed Forces implemented the Jingjin Program, we have entered a new era of defense transformation. In addition to the professional thinking of uniformed personnel, we further expect that defense civilian officials who have been through professional training in various fields and have different thinking can be incorporated in our defense system. Currently, this concept is gradually taking shape and is exhibiting concrete results from its implementation.



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Technology advancement brings along military innovations and indirectly changes the ways and means of future warfare. The two Gulf Wars are clear evidence that weapons quality is a key factor in determining the outcome of war. The acquisitions of modern weapons systems also play a critical role in the overall defense transformation efforts of the ROC Armed Forces. We can only achieve our military strategic objectives when the acquisition and maintenance of weapons can meet the needs of force buildup and combat readiness.

To maximize the economic efficiencies of the limited defense resources, the MND devises clear principles for weapons acquisitions based on overall national interests to direct future weapon research or purchase priorities. We also apply strict Major Investment Programming Procedure to carefully assess the efficiency and method of weapon acquisitions. The Integrated Logistics System (ILS) concept is also applied to establish detailed weapon life-cycle management systems and raise the reliability of the weapons systems. If our targeted modern weapon systems can be acquired, they will keep maintaining our superiority in quality of the overall warfighting capabilities in the foreseeable future.

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## **I. Weaponry Acquisition Concept**



Rapid advancement in military technologies resulted in a continuous upgrade of modern weapons systems. Maintaining the status quo will not only damage our superiority in quality but also hinder our abilities in responding to emerging threats. Furthermore, the effectiveness of any weapon system deteriorates over time and the efficiency gained from high maintenance costs is often inferior to that of purchasing new weapon systems. Therefore, the ROC Armed Forces need to continually acquire modern weapon systems to meet the needs of combat readiness in the future and return the technology and revenue to society through integration with domestic industries and in return generate maximum economic benefits for the nation. Important principles for weapons systems acquisitions for the ROC Armed Forces are described as follows:

#### 1. Stress "Focused Development" in the Allocation of Military Investments

Modern weapon systems acquisitions of the ROC Armed Forces are based on overall planning covered by the "Ten-Year Military Buildup Concepts" and "Five-year Defense Programming Plan." Deliberated on the priorities of military readiness, acquisitions are made based on scheduled phases to achieve the overall force construction efforts. In recent years, under the ROC Armed Forces' efforts to use limited defense resources efficiently, capabilities in air, naval and homeland defense have all improved. This yields considerable deterring effects on the PRC's propensity to initiate military actions against Taiwan.

Facing trends toward regional conflicts and critical developments in potential warfare and the increasing demand for efficient utilization of defense resources, the ROC Armed Forces' future weapons acquisitions will depart from the "service-balanced, uniform enhancements" approach towards "focused development," a new emphasis on joint operations. In anticipating future strategic situations, considering factors such as assessments of the PRC's military threats, expected defense resources and fulfilling defensive operational requirements, future military investments by the ROC Armed Forces will focus on building critical warfighting capabilities, mainly Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C<sup>4</sup>ISR) systems, joint air defense, joint interception and homeland defense. These efforts shall enable the ROC Armed Forces to retain partial combat superiority in key areas in the future conflicts.

## 2. Prioritize Self-Reliant Defense and Social Well-Being during Weapon Systems Acquisitions

To catalyze effective use of overall national resources, military weapons acquisitions must seek

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a balance between a self-reliant defense and the well-being of the society. This principle is adequately reflected in Article 22 of the National Defense Act:

"... shall follow national defense policies to consolidate efforts of the private sector to develop defense technology industries. Acquisition of weapon equipment shall firstly consider those built domestically. When it is necessary to pursue outsourcing channels, the acquisition activities shall realize technology transfer policy so as to establish an autonomous national defense infrastructure.

The MND may cooperate or mutually entrust with domestic or foreign and public or private corporate bodies to implement R&D, production, maintenance and selling of defense technological products.

In order to develop defense technology industries and relevant industrial developments, the MND may entrust the private sector with the management of the MND's subordinate R&D, production and maintenance infrastructures and their relevant facilities."

This Article provides the critical legal basis for the ROC Armed Forces weapons acquisitions program. The MND will uphold this principle and actively push for weapon system research and production affairs based on the overall force construction requirements to effectively support joints operation missions. In the mean time, the MND will actively promote the domestic military equipment systems market in hopes of integrating the defense industry with the capacity of the private sector. These







△ The weapon research and development of the ROC Armed Forces is committed to the spirit of self-reliant and achieved multiple breakthroughs





efforts are trying to address the nation's overall economic development and demand while expanding technology integration and application. To encourage private sector participation in the research, development and maintenance of military equipment, the "Annual Commercial Manufactured/Repaired Military Equipments Exhibition" was held in August 2005 in conjunction with the "Taipei Aerospace and Defense Technology Exhibition." This exhibit explored over 2,054 system, subsystem and components required for maintaining the armed forces' weapon systems. This is expected to stimulate approximately NT\$18 billion worth of business opportunities in the future while catalyzing upgrades in domestic industrial technologies. In the future, the MND will continue to hold similar activities to maximize the benefits of national resources.

## 3. Sustain the "From 0 to A, then A<sup>+</sup>" Policy in Weapon R&D Strategy

In weapon system research strategies, the ROC Armed Forces believe in the "from 0 to A, then A+" policy to meet the operational requirements. To shorten the time period required to acquire weapons systems and field them, and to effectively connect the research, development and production cycles, the MND has completed the Military Procurement Investments Planning, Programming and Budgeting Operating Regulation and relevant planning to clarify operational procedures. According to these regulations, all major weapons systems undergoing research and developments can be deployed to basic combat units on a trial basis after fulfilling basic operational requirements during preliminary combat assessments. The initial deployments can then gradually expand until full operational readiness objectives.

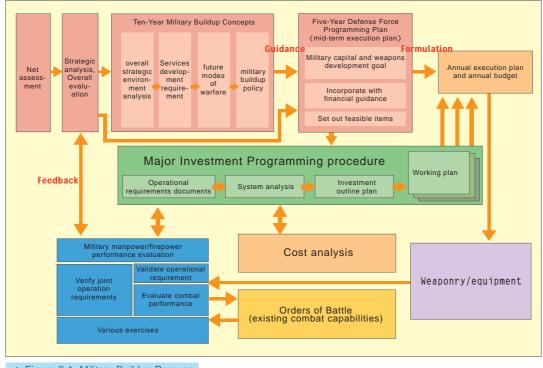
Facing the challenges imposed from the continuous development of high-tech weapons by the PRC, the ROC Armed Forces' weapon research programs focus on the policy of self-reliance and actively strives for the development of information and electronic warfare capability, low-altitude missile defense networks and anti-missile capabilities, C4ISR enhancements and the safeguard of critical infrastructure with a comprehensive plan on the primary research and development focus in each technological field. Currently, individual weapon research programs have all made major breakthroughs through the hard work of R&D departments and effectively raised the ROC Armed Forces' overall military capability.

# II. Military Buildup Procedures & Life-Cycle Management Mechanism

Military buildup of the ROC Armed Forces is planned, assessed and evaluated based on guidelines, evolution of enemy threats and joint operational requirements. The overall planning is executed through detailed major investment programming procedures to ensure maximum investment returns from the limited defense resources. Military buildup process, major investiment programming review and weapons systems life-cycle managements are summarized as follows:

#### 1. Military Buildup Plan

Military buildup plan and execution are based on the flow of "Ten-Year Military Buildup Concepts" and "Five-Year Defense Force Programming Plan," annual execution plan and annual budgets. The "Ten-Year Military Buildup Concepts" and "Five-Year Defense Force Programming Plan" are important documents in "designing" long-term force construction needs and outlining defense manpower and weapons systems construction goals. They are written by members of the joint staff from all fields of expertise and tasked to analyze possible future modes of warfare and keys to victory through rational and objective strategic analyses and considerations for all military (service)



△ Figure 8-1 Military Buildup Process



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development needs, objective (subjective) security situations (enemy threats), future technology development trends and defense resource conditions. They then set the directions of force construction, combat requirements and sequence of priorities, which are then transferred into actual weapon system requirements.

The operational requirements documents, system analysis, investment outline plans and working plans are completed under the guidance of military buildup concepts and defense force programming plan following the Regulations for Programming the Military Investment. This is to ensure that all investment plans are adequate, feasible and sustainable. Afterwards, through budgeting procedures, the annual execution plan and budget are completed to set out legislative budgets and armament acquisition priorities. When purchased weapons systems are proved to be meeting the operational requirements and placed in the orders of battle, they will undergo continuous exercises to verify their joint operational capabilities and provide feedbacks to the force construction planning workflow. (Refer to Figure 8-1, Military Buildup Process)

#### 2. Major Investment Programming Review

The Major Investment Programming Procedure of the ROC Armed Forces requires priority sequencing and system analysis measures to carefully assess the efficiency, feasibility and cost-effectiveness of each investment project. Priority sequence stands on the concept of joint operation. The need for a weapon system and the priority of the item in the acquisition list must be assessed for its contribution to operational performance in terms of overall combined firepower and joint operations. System analysis uses cost-benefit comparisons to analyze among various items the benefits of the life-cycle costs of the weapon, from acquisition, installation, utilization to decommission. This method allows optimal decisions in manufacture, R&D on weaponry procurement under limited national resources. The MND will subsequently complete the drafting, evaluation and authorization of the investment outline plan and working plan. These plans will then included in the annual budget estimation and presented to the Executive Yuan, then after obtaining approval from the Legislative Yuan, it will be signed by the President. With the stipulated funding, relevant procurement can come into practice.

Through this strict evaluation process, ineffective investments can be avoided and a balance between "today's budget" and "tomorrow's threat" can be met, thus maximizing the efficient use of defense resources. Also, the MND is devoted to establishing a weapons system acquisition environment through lawful administration and transparent decision-making to provide the ROC Armed Forces with high-quality and high-efficiency weapon systems.

**Building Modern Weaponry** 

#### 3. Weapon System Life-Cycle Management Mechanism

Military buildup and combat readiness objectives require the ROC Armed Forces to establish a suitable management mechanism before introducing or developing any weapons systems to the troops. The MND must oversee, manage and execute weapons related activities such as planning, development, production, employment, maintenance and decommission to fully utilize the expected benefits of the weapon system and minimize its life-cycle costs. Based on these considerations, the MND and all military service commands have established specialized units responsible for integrated logistics tasks, so that integrated support and resource management mechanisms can be established for weapons systems from requirements analysis, contracting, research verification, production designation, combat support to system decommision. This is to ensure performance of the weapon systems can meet the requirement and that supports may come rapidly, economically and effectively. After the Two Defense Acts came into effect, the ROC Armed Forces' weapon system acquisition and life-cycle management tasks are assigned to the various agencies under the military command, policy and armament branches and required services. The MND Armaments Bureau is responsible for relevant policies in armament acquisition. Currently, it has completed doctrines for acquisition management principles, project managements, system engineering management, testing and evaluation and integrated logistics support. The Armaments Bureau is also developing military logistics policies and systems for life-cycle project managers to establish precise guidance and regulations for armament development.

To enhance the armament acquisition management capabilities for all military cadres so that relevant concepts can be deeply rooted among all echelon of commands, the MND holds various annual professional training sessions such as project management, systems engineering manage-

ment, testing and evaluation, integrated logistics support and purchase management training. Individual services also conduct their own training and lectures accordingly. Besides, to enhance training and provide channels for information interchange between the ROC Armed Forces and the industries, government and academics, the MND holds Annual Discussion Forums for National



△ The ROC Armed Forces have established precise guidance and regulations for major innovations in the armament development system



Defense Armament Acquisition to enhance the mutual understanding and performance for the lifecycle management of defense weapon system. In the future, we hope to continue promoting lifecycle management concepts and work through the two aforementioned methods to actualize the lifecycle management mechanism.

On the management of armament life-cycle information, there are requirements to consider digitizing all logistics operation for weapon systems in every stage of the investment programming cycle to enhance the support capability for weapon systems. In the future, the MND will gradually setup an armament management information system to gather data on supply, maintenance, repair and operation to enhance the contents of the logistics support parameter database. This will effectively push for transparency in logistics resources for weapons systems and enhance the readiness and reliabilities of the weapons systems.

In logistics management information, we will push for a common operational environment and interface based on existing logistics systems of the individual services and the Combined Logistics Command to improve the performance of logistics information management. Simultaneously, important logistics parameters will be selected to provide logistics decision-making information. The entire project will be divided into 3 stages: "integration planning," "system research and modifications" and "system verification and validation," which is expected to be complete in 2007. Currently, the "Armed Forces Logistics Management System" and the "Disaster Relief Information Management System" are already in use, allowing commanders at all levels to be able to instantly dispatch troop logistics capacity as a reference in battlefield decision-making. Through breaking down the administrative hierarchy in the armed forces, units can request active supplies through network connections, which greatly helps reduce operational procedures and increase the efficiency of support. This approach provides necessary information for decision making during military operations along with saving public funds and unnecessary manpower. Additionally, the MND is continuously integrating and developing a real time, precision operations management system for logistics. System function validation has been verified through the annual Hanguang military exercise, showing which system function can be enhanced according to the live testing results of the exercise. We hope that a digitized management model can create a management mechanism consistent throughout peacetime and wartime, thus improving the ROC Armed Forces' performance on integrated logistics support management efficiency.

In the future, the MND will improve the weapons life-cycle management and logistics management mechanism, clarify logistics jurisdictions between "force construction" (weapon employment stage) and "force utilization" (weapon service stage) stages, and incorporate modern enterprise concepts to strive for enhancements in integration, digitization, accuracy and professionalism to create a modern corporate management environment for military logistics. We will also appropriately

Building Modern Weaponry

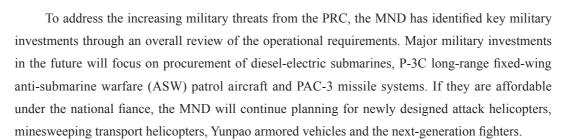
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integrate, manage, allocate and apply limited available resources to support operations in the "right time, right place, right quality and right quantities." Also, the MND will incorporate civilian technologies and manpower to accelerate promotion military equipment productions through civilian contractors, in order to lower military investments costs while boosting the performance of logistics support personnel.

National Defense Report

# **III. Current Weapon System Acquisition**



The arms procurement plans for the three major weapon systems were proposed to the United States from 1995 to 1998. During that time period, the US dispatched assessment teams to Taiwan for combat capability assessments and confirmed that these three weapon systems are extremely needed purchase for the ROC's "self defense" policy. Decisions were made in 1999 and 2001 to related items to Taiwan in accordance with the Taiwan Relations Act. With the consent to sell from the United States, the MND reassessed the arms procurement plan and reconfirmed that it meets future force construction needs. The official investment procedure was followed with the completion of the operational requirements document, system analysis reports and investment plans. These requests were latter submitted to the Legislative Yuan for authorization in June 2004 after the approval from the Executive Yuan.

These three weapon systems to be procured are all top-notch weapons. The PAC-3 missile's interception capability has been proven to be far higher than that of PAC-2 being verified through live combat. The P-3C long-range fixed-wing ASW patrol aircraft is in active service in the American military, and used by 16 countries over the world. The newly designed and manufactured diesel -electric submarine will be equipped with submarine-launched anti-ship missiles, advanced torpedoes and high-tech U.S. electronic warfare systems. If the ROC Armed Forces can acquire the three weapon systems, there will be structural changes in ensuring our maritime security and our military power against the PRC. Additionally, we can effectively reduce the impacts of the PRC's military threats against Taiwan. The three weapon systems can yield major military strategic benefits de-





scribed as follows:

#### 1. Diesel-Electric Submarines

Currently, the ROC Armed Forces possesses four diesel-electric submarines. Among which, the American Guppy II, Hai-Shih (SS-791) and Hai-Pao (SS-792) are both over 50 years old and in urgent need of replacements. Also, the Dutch Hai-Lung (SS-793) and Hai-Hu (SS-794) have both served for over 25 years. Although they still possess considerable combat capabilities, many equipments require further enhancements. Therefore, to maintain submarine warfare capabilities, the ROC truly needs newly-designed diesel-electric submarines.

The newly-designed diesel-electric submarine will use high-strength steel plating and sound absorption material for the hull resulting in lower noise than the nuclear submarines. It will be equipped with advanced U.S. combat systems, submarine-launched Harpoon missiles and advanced torpedoes, which will greatly increase survivability and firepower. After the navy acquires the submarines, its early warning and monitoring range will increase five-fold and mobile strike capabilities will increase by over 100 times. When complemented by Kidd-class destroyers and P-3C ASW patrol aircrafts, they will impose visible deterring effects against PRC's intents of naval blockades.

# 2. P-3C Long Range Fixed-Wing ASW Patrol Aircrafts

The ROC currently depends on the U.S.-made S-2T anti-submarine aircrafts which have served for over 40 years, clearly far beyond its service life cycle. Furthermore, its equipment and features cannot meet the anti-submarine requirements of the ROC Armed Forces.

The P-3C long-range fixed-wing ASW aircraft possesses several superior characteristics; namely, faster speed, longer endurance time, great surveillance range and higher ammunition capacities. Its datalink system is compatible with the ROC Armed Forces, which is beneficial for intelligence data exchange in effective detection and attack of surface and underwater targets. The P-3C long-range fixed-wing ASW aircraft, when combined with Kidd-class destroyers, can greatly increase three dimensional joint anti-sea combat capabilities. In peacetime, it can perform anti-submarine and reconnaissance missions and ensure security on maritime routes between Taiwan and the international communities. In wartime, it can perform anti-submarine, joint and mine-laying operations, making PRC's naval blockades against Taiwan more difficult.

# 3. PAC-3 Missile Systems

The PAC-2 missile is the current anti-missile system used in the ROC. Because it was manufactured much earlier, its interception rate is below that of the PAC-3. Its defense capability for population centers and industrial facilities decreases on a daily basis.

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After acquiring the PAC-3 missiles, the ROC Armed Forces' anti-missile coverage area will extend to critical cities and strategic locations in northern, central and southern Taiwan. Population protection capacity is expected to increase from the current 25% to 70% and protection capacity for industrial facilities is expected to increase from 8% to over 60%, greatly reducing the offensive power of the PRC's guided missiles and increasing uncertainties in the use of the PRC's "assassin mace" weapon. The PAC-3 missile can therefore be seen as a key investment in countering a theoretical paralysis war against Taiwan from the PRC and, as such, is of tremendous help in stabilizing the population and morale and maintaining our combat capabilities.

These three major military acquisitions are executed through mutual trading between the two governments. With the full control measures provided by the U.S. regulations, professional management teams and contracting mechanism, corporate fraudulence and conflicts can be effectively eliminated. The MND will abide by the Government Procurement Act and Procurement Regulations for Military Agencies and follow the strict evaluation mechanisms through approval from the National Audit Office of the Control Yuan and supervision from the Legislative Yuan. Furthermore, military procurements proposed by the ROC Armed Forces are not an arms race against the PRC, but, rather, for self defense needs. In fact, the ROC has no intention or ability to engage in an arms race against the PRC. Self defense is a legitimate action that a country can undertake when facing external military action and needs to be adjusted according to the degree of threat. It is a passive response, not a pre-emptive action. Therefore, while the PRC increases its military threats against Taiwan on a daily basis, the ROC Armed Forces increasing its self defense power through advanced weapon systems acquisition should be a solid protection for maintaining stability across Taiwan Strait, rather than a root cause for triggering military tension. Acquiring new weapon systems is an important method to increase combat capabilities and an important step in defense transformation. The goal is to maintain the superiority in quality for the overall warfighting capabilities of the ROC Armed Forces.









- Joint Operations Planning Concept
- II. Joint Operations Command Mechanism
- III. Joint Operations Doctrine Development
- IV. Joint Operations Force Buildup
- V. Joint Operations Exercises



Future warfare must integrate the function of Intelligence, Surveillance and Reconnaissance (ISR) and the battlefields will be dominated with high-tech systems, information and electronic superiority and precision strike weapons systems. Combat will be fast-paced, with no well-defined frontlines or directions in terms of battlefields or rears and will definitely require joint operations from the armed forces. Therefore, the force restructure planning of the ROC Armed Forces designates Taiwan, Penghu, Kinmen and Matzu as one theater. Based on the "joint planning, enhanced force building and joint defense operations" guideline, the planning regulates the joint operations force restructuring development plans and validates them through the Hanguang and other exercises with visible enhancements.

National Defense Report

# **I. Joint Operations Planning Concept**



The overall joint operations concept of the ROC Armed Forces is based on constructing "long-range and in-depth warfare" and "synchronized joint engagement" capabilities to achieve "source-deterring, naval and air interceptions and elimination by counter amphibious landing" operations. When the enemy exhibits apparent intentions or actions of hostility, our defensive actions will include selecting targets of greatest strategic significance or posing the greatest threats, effectively integrating all military manpower and firepower from individual services and positioned in multiple layers according to weapons systems ranges and capabilities, gradually eliminate the enemy through these layers of interceptions and finally achieve our defense objectives. Currently, the ROC Armed Forces have reached level three of the five-level joint operations development plan. Tightly coordinated joint operations will be accomplished by the future integration of the command and control (C2) datalink system provided by the Jingjin Program, which can coordinate movements between the services on the same spectrum. Reaching the level four—"integrated joint operations" and subsequently advance to level five—"mutual dependent joint operations" will further consolidate the ROC Armed Forces' joint operations capability. (Refer to Figure 9-1, Objective Levels of Joint Operation Development)





△ Establish elite joint warfighting capabilities, strengthen joint interception capabilities

# 1. To Unify Joint Operation Command and Control Authorities

In recent years, force planning of the ROC Armed Forces all centered on the development of joint operations. Other than actively organizing and implementing the joint operational command mechanism, we are continually enhancing the mechanism's capacity and incorporating RMA (revolution in military affairs) principles. Coordinating with the Jingjin Program's second-stage implementation and weapons systems enhancements, our emphasis is on unifying governance over joint operations command and control to create an integrated and effective joint operations force with a simplified and agile chain of command and more handy logistics support to defeat any hostile forces.

# 2. To Implement Integrated Command and Control System for Joint Operation

In future warfare, digital datalinks will be critical equipment for control of intelligence and information to effectively execute command and control and utilization of military manpower and firepower on the battlefield. Based on the requirements of joint operational requirements planning, the ROC Armed Forces will establish battlefield management systems and implement integrated joint operations communications by using the concept of network centric warfare. The battlefield management system will be completed through the execution of the Po-Sheng Program providing connectivity to individual platforms. Joint operations command centers and joint operations centers of all strategic executive levels can share common situational awareness and will be able to carry

out synchronized joint operational command and control.

### 3. To Organize Fine Joint Warfighting Capabilities

To achieve strategic sustainability, the ROC Armed Forces adhere to strategic concept and guidance to accelerate developments in defense capabilities. Through perfection in joint operations mechanisms, modern battlefield management complemented by multi-discipline deterrent warfighting capabilities, we will be able to cease enemy force projection and defuse its invasion capabilities through means of destruction, constraint and attrition. In response to the PLA's non-linear warfighting models, the ROC Armed Forces focus on enhancing air and naval warfighting capabilities in joint interception and effectively enhancing joint operations capabilities aimed at preventing "rapid dominance" from the enemy to ensure national security.

# 4. Enhance Joint Interception Capability

Based on the principles of joint interceptions, the ROC Armed Forces will establish long-range, in-depth strike and synchronized joint engagement capabilities to achieve "source-deterring, naval and air interceptions and annihilation at enemy's amphibious landing." After sustaining the first strike, or after the enemy launches its first offensive actions, the ROC Armed Forces will employ "hitting first without moving first" maneuvers in coordination with multi-discipline deterrent forces to execute long-range precision strikes and gradually destroy enemy forces. The joint interception planning of the ROC Armed Forces has greatly improved the warfighting capability after validation-from the various Hanguang exercises. The ROC Armed Forces will continue to acquire advanced weapons according to the ten-year military buildup concept and the basic foundation of the Jingjin Program. We will consolidate joint interdiction capabilities to respond to the PRC's rapid armament expansion and the evolution of coastal defense strategic principles to support the strategic framework of "effective deterrence, resolute defense" and achieve prevention of war.

National Defense Report

# **II. Joint Operations Command Mechanism**



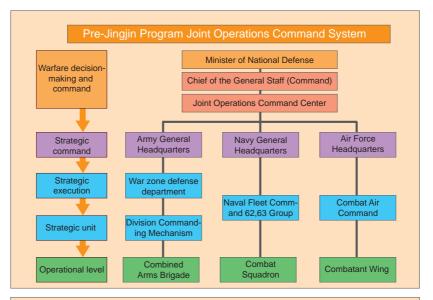
Enhancing Joint
Operations Capability

To establish mechanisms that are consistent through peacetime and wartime, with appropriate jurisdiction and able to sufficiently utilize the effectiveness of joint operations, the ROC Armed Forces Joint Operations Command Center will directly control all strategic executive levels and establish tight joint operational command networks. Strategic executive levels will restructured into joint staff formation to address hostile threats and the nature of future Taiwan-Penghu defense op-

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erations. The result is a joint operations mechanism with simplified force employment, flattened chain of command and precision command speed. (Refer to Figure 9-2, Pre-Jingjin and Post-Jingjin Program Joint Operations Command Hierarchy)

The operation of the joint operations command mechanism depends on the link between command and control systems and battlefield management systems. In recent years, the ROC Armed Forces





△ Figure 9-2 Pre-Jingjin and Post-Jingjin Joint Operations Command Hierarchy

have been enhancing battlefield management functions and accurately monitoring areas such as battlefield situations, firepower coordination, targeting intelligence, post-combat assessment and command and control, etc. Other than continuing refinements on the command and control capability of the Hengshan system, the ROC Armed Forces can effectively integrate and connect important C<sup>4</sup>ISR systems and weapon platforms after the Po-Sheng Program's advances into the system implementation stage in 2005 and the program's subsequent completion. This will establish real time battlefield intelligence and control and command systems, so forces at all levels can synchronously keep track of battlefield situation, enhance battlefield monitoring and effectively perform battlefield management, allowing further perfections in joint operation command and control, thus benefiting from the execution of joint operations.

In order to harness highly effective command capabilities from the ROC Armed Forces' joint operations command mechanism and retain the flexibility acquired through high survivability, the

following enhancements will be implemented to integrate all command and control devices and platforms to effectively utilize battlefield management:

# 1. To Integrate All Command and Control Devices and Platforms

Currently, the Hengshan system is utilized as the integrating platform. All command and control devices and platforms are integrated under the Hengshan system for simplification purposes. System features were gradually upgraded as the budgets allowed. The Hengshan system can harness joint operations command and control and battlefield management functions such as battlefield awareness, mission planning, battlefield spatial coordination, targeting and weapons, battlefield spatial/execution management, intelligence, alerts and early warning management, readiness and tactical maneuver, etc., thus effectively executing the joint operations command functions.

# 2. To Enhance Survivability of Multi-layered Communications Systems

To enhance the survivability of the military command and control systems, we will continue pushing forward acquisition of tactical digital datalink systems planned in the Po-Sheng Program. Integration with optical fiber system, the army IMSE system, microwave and EHF systems into multi-layered communication systems will enable them to possess auto-routing functions to establish real time battlefield intelligence and command and control systems functions. This will enable all combat units to synchronously exchange tactical information, enhance battlefield monitoring capability, ensure secure information environments and effectively perform battlefield management. The outcome is an enhancement to the overall electronic warfare capability of the ROC Armed Forces and the survivability of communication systems, which will actualize effective command efficiency for the Joint Operations Command Mechanism.

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# **III. Joint Operations Doctrine Development**



Military doctrines are the basis upon which the ROC Armed Forces direct buildup, combat readiness and force employment theory and practice. It covers tactics, techniques and every level of Enhancing military affairs execution, forming a comprehensive system for which the armed forces direct operations, education, training and management.

# 1. Policy Planning

Military doctrine development is based on national situation and strength, enemy threats and

Operations Capability

evolutions in war, technology, etc. It combines the RMA mindset and plans for the systematic approach, authorities and principles of doctrine development. It also focuses on joint operations to integrate combat support and professional manuals to establish comprehensive doctrine systems of all types for all levels. It is planned to reevaluate and amend annually so that the doctrine development possesses foresight, practicality and innovation, which enables it not only to fit current situations but also to address future combat needs.

# 2. Military Doctrine Development System

Doctrines are developed under the guidance of the "military philosophy" and the "guiding principles of generalship" for the ROC Armed Forces and separated into three systems: policy, armament and command. They are then separated into operational, special and general doctrine and devised through division of labor between the MND and all relevant agencies (i.e. agencies, troops, schools) under the individual services. (Refer to Figure 9-3, Military Doctrines Development System)

# 3. Organization of Military Doctrine Development

#### (1) Ministry of National Defense

Directed by the "Steering Committee for Doctrine Development," specialized doctrine development is handled by appropriate joint staffs, departments, agencies and offices. Subordinate schools will assist in doctrine compilation-related tasks.

#### (2) Joint Operations Training and Doctrine Development Office

It is responsible for policy planning and operating regulations for military doctrine development. It also supervises and manages the implementation of all doctrine development.

#### (3) Military service commands

They are responsible for military service doctrine compilation as directed by the Service Doctrine Development, Publication and Approval Steering Committee. Each division and military service school assists in relevant specialized doctrine compilation tasks.

#### (4) Area commands

They are directed by the Steering Council for of Military Branch Service Doctrine Development, Compilation and Evaluation. Doctrine education divisions and all military supervision and branch service commands handle compilation for all categories of doctrine. (Refer to Figure 9-4, Military Doctrines Development Organization)

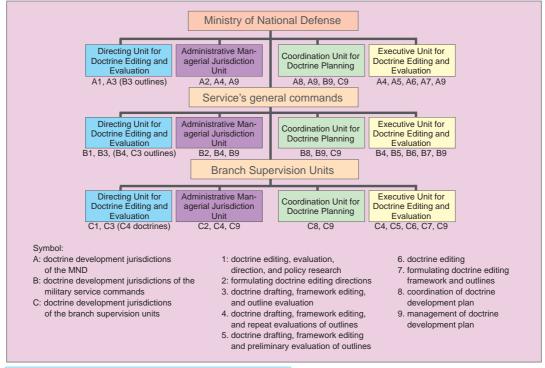
### 4. Current Execution Results

(1) The doctrine development systems with three broad categories of "operational, professional



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#### △ Figure 9-4 Military Doctrine Development Organization

and general" doctrines are completed and merged with the revision of ROC Armed Forces Doctrine Development Operating Instruction to clarify the authorities, responsibilities and operating procedures of individual agencies.

- (2) Consolidate current development status with continuation in formulating the doctrine development system chart for the ROC Armed Forces while supervising the execution of military doctrine development, research and compilation work. In response to the promulgation of the Two Defense Acts and organizational reforms outlined by the Jingjin Program, the current quantities of doctrine (including guiding principles, educational outlines, field manuals and pamphlets) will be critically assessed. Categories of doctrine will be simplified while their contents will be enriched, in the hope that military doctrine can combine objective and subjective environmental factors and grasping the "written for warfighting," "trained for warfighting" principles. The goal is to integrate joint operations with warfighting models of individual services and establish evaluation and verification mechanisms, thus enhancing the quality of military doctrine.
- (3) To address factors such as the establishment of military strategic decision-making and command systems, anticipation of enemy military strategies, tactical philosophies and evolutions in principles of military maneuvers, etc., the practicability and appropriateness of joint operations doctrine will be verified through the Hanguang exercises and compiled to address the nature of Taiwan-Penghu defense operations.



- (4) From 2000 to 2005, the ROC Armed Forces have completed compilations of Guiding Principles for Joint Operations of the ROC Armed Forces and twenty types of joint operations doctrine, which are edited after annual validation from the various Hanguang exercises to meet practical needs. 102 joint operations doctrine provided by allied nations have been translated. Furthermore, relevant joint operations planning will be formulated to regulate command and control authorities and responsibilities, procedures and references for joint operations. The National Defense University will be responsible for integrating joint operations training classes and establish a professional curriculum based on the practical needs of the Taiwan-Penghu defense operations, to enhance the joint operation capability of the ROC Armed Forces staffs.
- (5) To achieve the goal of "doctrine formalization at the completion of regimentation," relevant joint staff, military service inspection, doctrine and training departments will be merged into inspection teams, focusing on areas such as Hanguang exercises, the Po-Sheng Program, newly established units and acquisition of new weapons equipment to monitor and understand the state of military doctrine development.

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# **IV. Joint Operations Force Buildup**



In recent years, under the guidance of "reducing quantity, improving quality" and "new high-tech" force restructuring developments, the PLA continues to enhance its missile deployments towards Taiwan and develop naval, air and joint operational capabilities. In response to the PRC's continuous military expansions and the resultant threats to Taiwan's security, the ROC Armed Forces are actively restructuring the organizational framework of military manpower, promoting all-out defense and consolidating joint operations efficiency. Furthermore, the ROC Armed Forces will conduct in force restructuring planning in accordance with the development principles of "advanced technology taking the lead, information and electronic superiority, joint interdiction and homeland defense" and actively develop warfighting capabilities sufficient for deterring hostile forces.

# 1. Increase Joint Consensus and Develop Joint Efficiency

Force construction planning of the ROC Armed Forces focuses on integrating and utilizing joint operations warfighting capabilities of the individual services. We will capitalize on measures such as sustained operation of joint operations mechanism, establishment of joint forces, enhancements in joint operations training, amendments in joint operations doctrine and validation through exercises. Further efforts will be made to integrate joint operations command-and-control, C<sup>4</sup>ISR

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software and hardware to enhance battlefield management and harness the full potential of joint operations efficiency, in order to respond to the PRC's strategy of "winning a campaign in a remote area quickly, and winning the first campaign decisively" against Taiwan.

# 2. Joint Surveillance and Enhancing Battlefield Command and Control

After completion of the Po-Sheng Program, the MND will integrate battlefield intelligence from early warning aircraft, satellites, radars and warships forming tight joint surveillance and battlefield management platforms through the multi-layered communication network of the armed forces with shared battlefield imaging. This will enhance transparency in the surrounding maritime and air combat zones for Taiwan's peripheral areas, enhance efficiency and survivability in the command and control function of the joint operations command mechanism and thus benefit the execution of joint interceptions.

### 3. Fortify Joint Protection to Ensure Infrastructure

The preservation of the armed forces joint combat capability and its anti-special operations seek to maintain fundamental establishments in politics, economy, morale and military. Numerous "Hanguang Exercises" have testified that each operational area has already completed contingency response measures of the infrastructures. In addition, by coordinating with the force deployment adjustment per Jingjin Program, the armed forces can now effectively engage in anti-special operations against the enemy. Moreover, in order to locate critical nodes of protective targets, devise detailed protection efforts and ensure comprehensive combat capabilities, various operational areas have already designated effective contingency forces according to enemy threats, nature of protection targets and mobility. For example, airports and naval ports will be mainly guarded by mechanized armored troops, while the Army aviation and special forces will be stationed in the high mountains to counteract the enemy's special operations. The armed forces will also monitor precisely the frequency and cycle of the PRC's satellite activities above Taiwan and the islets in peacetime and possible actions that may be taken by the PRC in wartime by way of "camouflage," "evacuation," "cover," "mobilization," "operational redeployment," and utilizing civilian fortresses. All these work to fortify the protection efforts of infrastructures.

# 4. Long-range Precision Strikes and Destruction of the Enemies' Core Warfighting Capabilities

The construction of the deterrence capability of the ROC Armed Forces are aimed at weakening the enemies' combat capacity and stagnating or repelling enemy offensives. In the future, the unified command of the Joint Operations Command Center integrated with air and electronic warfare func-



tions will allow precision strikes, destruction, sabotage, paralysis and exhaustion of the first-wave enemy offensive against Taiwan. Simultaneously, it can also ensure the mobility of the ROC Armed Forces, selection of targets which pose the greatest threat to Taiwan and thus utilizing joint operations capability and integrated weapons systems efficiency to gradually eliminate invading forces, making it the best strategic goal for source-deterring.

# 5. Joint Multi-Layered Interceptions for Secured Air Defense

The PLA's guided missiles are the greatest threats to Taiwan's air defense, so the ROC should actively develop low-altitude air defense artillery (ADA). After the completion of the networked command, control and surveillance systems for shared anti-missile joint engagement, it will possess active "critical area defense" functions. Under the operational control of the Joint Operations Command Center, the current PAC-2 air defense missiles will be utilized in coordination with the planned purchase of PAC-3 air defense missiles to form a tight low-altitude pan-Taiwan anti-missile defense system. Also, we will also employ the air force's beyond visual range firepower and the navy's anti-air firepower to establish a multi-layered anti-air interception network, utilize the multi-layered interception capabilities to protect the overall warfighting capability, thus ensuring Taiwan's naval and air spaces security.

# 6. Joint Counter-blockades to Annihilate the Enemy upon Landing

Navy's warfighting capability developments focus on missile-oriented ship weaponry, automated command and control and 3-D anti-submarine operations. After the final incorporation of the Keelung class vessels into the navy, the command and control efficiency of the Maritime Joint Operations Command Center will be improved tremendously by simultaneously extending the operational radius of the southern, northern and eastern sea-and-air regions. If diesel-electric submarines and long-range anti-submarine aircraft are acquired as planned, they can enhance anti-submarine functions and enable air combat management, sea-surface strikes and rapid mining functions. We will also incorporate sea-surface combat support groups, submarines, auxiliary warships and air and coastal firepower to secure and maintain safe routes and carry out sea-and-air joint escort operations, which can effectively counter enemy blockade maneuvers and ensure access to international waters.

# 7. Elimination of Enemy Amphibious Landing Forces through Joint Firepower

Littoral areas are the weakest link of traditional amphibious operations. The Army will acquire mobile MLRS (multiple launch rocket system) to be employed in coastal areas, complemented with army aviation to extend the land-based anti-sea capabilities. With enhancements to the Army's joint operations command and control platform functions in all area commands, the joint warfighting

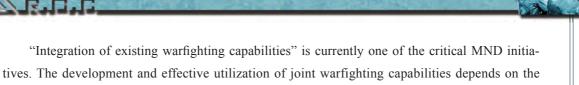
capability will improve considerably. In terms of debarkation strikes and shoreline elimination assaults, each area command can effectively combine naval and air power, army aviation attack helicopters and precision-based firepower to rapidly assemble joint firepower to employ in nearby maritime and coastal areas, so that enemy landing troops will not be able to conduct successful landings.

# 8. Rigid Information Security Protection, Ensure Information and Communication Security

Under the threats of information warfare from an organized "Net Army" by the PLA toward our critical military information systems, the ROC Armed Forces must construct rigid information and communication security protection mechanisms and capacities to ensure the normal operations of our critical command and control systems and communications and information infrastructures. The development strategies include constructing professional forces, acquire various equipment and systems, develop relevant doctrine, procedures and regulations, acquire key technology development capacity, strengthen communications and information security education, enhance relevant concepts and cultivate elite personnel, integrate joint operations command mechanisms, strengthening information and communications security contingency operations, enhancing mobilization readiness to integrate with the overall national information and communication security protection capacities.

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# **V. Joint Operations Exercises Enhancement**



results of joint warfighting exercises in peacetime. Facing future challenges of "multi-dimensional battle space," "all-out information and electronic warfare," "non-contact combat engagements," "all-out involvement warfare" and "unrestricted warfare," the ROC Armed Forces have planned five concrete measures to improve joint operations, which can be summarized as follows:

# 1. Improve Exercise Planning and Enhance Joint Warfighting Capabilities

To build on the accomplishments of the Hanguang No. 20 & 21 exercises and continue investigation on enhancements for existing problems in combat readiness, the MND will focus on verifying the restructured organization, operating procedures and command and control capacity of the ROC Armed Forces joint operations command mechanism and evaluating defense operation readiness and the appropriateness of developments in the warfighting capability. The Hanguang No. 22





exercise were built on the results of the Hanguang No. 21, incorporate the organization restructuring of the Jingjin Program and actively enhance the applied knowledge and quality of the joint staff. Along with the schedule of the Po-Sheng Program, the MND will gradually enhance the joint operations command mechanism and battlefield management efficiency and more earnestly investigate potential problems within the military crises management mechanism and invite all departments to collectively deliberate on solutions. To effectively respond to threats of unlimited warfare from the PLA and the dangers of terrorism, the MND will collectively enhance homeland defense capabilities, concentrate national strength and realize the all-out defense to ensure national security.

# 2. Expand Reserve Mobilization and Enhance Overall Warfighting Capabilities

Under the guidance of the "regulars for strikes, reserves for secure" principle and in coordination with progress in the Jingjin Program, military manpower will be separated into regular forces and reserves. Regular forces will handle rapid response combat and mobile strike missions. Reserves will handle disaster response and support and homeland defense. In 2005, Hanguang No. 21 exercise mobilized a reserve brigade for the annual Hanguang and Tongshin exercises. Results have been verified to be positive. The 2006 plan calls for the enhancement of the coordination capabilities and operating mechanism for all agencies. Also included is the expanded mobilization of various types of reserves to validate mutual support operating mechanisms and operational guidelines. This is to enhance the all-out defense capabilities, thus enabling execution of broad-based homeland defense operations and thus ensuring national security.

#### 3. Enhance System Performance and Support Validation through Exercises

Since the Hanguang No. 20 exercise, the ROC Armed Forces have introduced Joint Theater Simulation Systems from allied nation to conduct war games. Execution results show visible enhancements compared to the past. However, there is still considerable room for enhancement in meeting the needs in terms of Taiwan-Penghu defense operations environments and characteristics. To realize the management principles and concepts of the joint operations training system and continue enhancing the ROC Armed Forces' joint operations training results, we have initiated developments on an armed forces joint operations training management system that fulfills the requirements of Taiwan-Penghu defense operations. Through strict and detailed requirements, planning, execution and evaluation procedures in joint operations training and automated standard operating platforms, we will gradually implement the system from strategic executive levels to basic fighting units, in the hope to further perfect the ROC Armed Forces' joint operations training system, so as to improve joint operations training results and capability. Compared to previous years, it will better serve the needs of future battlefields and provide enhancements in joint operations capabilities.

Chapter 9







△ Operation drills and exercises are carried out in order to precisely evaluate the efficacy of the armed forces' combat readiness training

#### 4. Simplify Exercise Missions and Strengthen Basic Training

The Hanguang No. 22 field exercise planned in 2006 has simplified and merged with the annual joint operations exercises. Conceptualization for the second-stage computerized war game will continued. All troops will report exercise results under a unified conceptual framework, perform "preservation of warfighting capabilities," "joint interceptions" and "homeland defense" procedures in the "synchronization throughout different locations" setting. All units are guided to implement the field exercise by the Joint Operations Command Center to meaningfully assess the ROC Armed Forces' training results on combat readiness in order to enhance joint operations capabilities and ful-

fill combat readiness tasks.

### 5. Improve Exercise Topics, Elevate Training Effectiveness

To effectively enhance the ROC Armed Forces' joint operations efficiency and fulfill the needs of future warfare, the ROC Armed Forces will continue assessing and improving joint operations exercise topics and implementation methods. Ineffective training classes will be eliminated and more flexible training methods will be applied. Also, to address to the Jingjin Program's second-stage warfighting capability developments and designations of regular and reserve troops, the ROC Armed Forces will assess comprehensively the utilization of current training grounds with consideration for more emphasis on the planning of troop training and training facility development. Other than fulfilling the needs for basic and special operations training, we will consolidate the utilization of existing resources to develop large, generalized, modernized, standardized and formalized training grounds for joint operations. The ROC Armed Forces will continue the purchasing of training simulation instruments, enhance basic training requirements and use network and multimedia education to simulate battlefields. Verification of tactical training will be conducted through live exercises with increased training frequency to accumulate warfighting experiences in order to effectively increase joint operations training efficiency.



>>> National Defense Report The Republic of China



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Chapter 10 Concept and Vision of All-out Defense

Chapter 11 Interdependence of Defense and Society,

Chapter 12 An All-out Support for and Participation in Defense













countries in the 21st century as well as a necessary mechanism in testing whether a country can withstand the impacts of war when outside aggression arises. The construction and development of national defense have always preceded national infrastructure affairs. Therefore, the more advanced a country, the more important a national defense establishment is. And the closer a country is to war and threats to survival, the more important it is to harness consensus and action for "all-out defense." Conceptually, "all-out defense" refers to the understanding of national defense from the civilians who exhibit high degrees of persistence and determination to fight against the enemy. Fundamentally, all-out defense refers to the public's support for national defense. It involves the build-up, application and engagement of a nation's overall strength, and the concrete execution of the nation's survival strategies of "the weak against the strong" and "all against the enemy." Practically, all-out defense refers to the civilians' participation in national defense. Comprehensive considerations and substantial and functional plans must be outlined from the perspectives of legislation, pragmatism, long-term national development and enemy threats. Institutionally, the framework must base on "psychological defense" in support of "military combat" as the core to amplify the effect of "the people's defense" so as to capitalize on "all-out defense mobilization" as the ultimate determinant for victory. All of these four are indispensable to one another and must be coordinated with efficient mechanisms and comprehensive legislative provisions so that the synergistic effects of the nation's overall strength may come into full play.

# **I. Consolidating Consensus for All-out Defense**



#### 1. Principles of All-out Defense

#### (1) Conceptual Outline of All-out Defense

"All-out defense" refers to an aggregated national defense power derived by combining available tangible weaponry and civilian resources and psychological willpower from both the military and the civilian regardless of peacetime or wartime, frontline or rear area. In other words, all-out defense takes national defense weaponry as core, all-inclusive defense as entity, and the national defense establishment as foundation. Therefore, "all-out defense" possesses the following properties: fusion of peacetime and wartime defense functions, oneness of the military and the civilian, all-inclusive participation in defense with openness and transparency, fusion of national, civil, and psychological defense, fusion of defense and civilian technology, and fusion of tangible and intangible combat powers.

#### (2) Legal Sources of All-out Defense

To implement the principle of all-out defense, the ROC government has legislated several statutes to take this goal into effect. For example, the National Defense Act took effect on March 1, 2002, states in its Article 3: "The national defense of the Republic of China is of all-out national defense, involving affairs pertaining to military, civil defense and those in political, economic, psychological and technological domains, which may directly or indirectly contribute to the national defense." The "Act of All-out Defense Mobilization Preparation," enacted and promulgated on November 14, 2001, is also a concrete step towards actualizing the principle of all-out defense. Since June 3, 2002, the Executive Yuan has also maintained a mobilization conference, formally initiating work on an all-out defense mobilization system that is vital to national security. Also, to further promote a legal awareness of "all-out defense" and enhance Taiwan's overall defense capabilities, the "All-out Defense Education Act" was enacted and promulgated on February 2, 2005, and officially took effect on February 1, 2006. All-out defense has so far been sufficiently supported by the rule of law for most intents and purposes and will thus produce positive benefits in developing patriotism in the citizenry, actualizing all-out defense, and ensuring national security and the people's well-being.

#### (3) Recognition for All-out Defense

War affects not only military affairs but also various social spheres. In evolutionary peacetime, war and the patterns of security threats have also undergone remarkable changes. Therefore, defense has become closely related to national development and the people's lives and asset, and is no longer for the sake of military actions and servicemen's responsibilities. Victory can only be achieved through consolidating power from the entire population. As our national defense establishment trims

and streamlines its regular military forces, it is of great importance to accumulate "large reserve forces" and push for the "integration of defense and industry" based on the Act of All-out Defense Mobilization Preparation. Moreover, it is to consolidate the people's willpower and actualize all-out defense through aggregating the power from the public. This type of all-out defense is based on establishing "tangible combat power" and "intangible psychological defense," which take the political establishment as the foundation, military buildup as the core, economic development as the backbone and psychological establishment as the driving force. In this way, the "military and industry integration" policy will be realized, the nation's manpower, material and financial resources will be efficiently utilized, and defense preparations will be supported as to enhance the strength of all-out defense.

#### 2. Building an Awareness for Potential Crisis

The greatest threat to Taiwan's national security comes from the PRC. Over the past several decades, the PRC has persisted with various political assaults and military threats, and has attempted to stir discord within Taiwan and isolated it diplomatically. Taiwan's people cannot take a chance to expect international assistance and friendly responses from the PRC. We need to actively consolidate our military establishment, integrate military-civilian power and raise the people's awareness of the notion that everyone is connected to and responsible for national defense and security, so that, in crises or war, we may consolidate the people's willpower to respond to threats against national security.

In recent years, the PRC has kept exercising its two pronged strategy (carrot and stick) toward Taiwan with the intent of obscuring identities of enemies and allies, causing our psychological combat readiness to lapse, and thus "making Taiwan surrender without a war" and achieving its objective of peacefully incorporating Taiwan. In terms of the PRC's intangible military strategic intimidation, they primarily rely on "three warfares" as their main thrust. As for the "legal warfare," they refuse to abandon military options against Taiwan, but stipulated the Anti-Secession Law to serve their purpose of catalyzing unification through legislation. As for "psychological warfare," while the Anti-Secession Law evoked fierce reactions from Taiwan, the PRC then actively pursued united front techniques to win approval from the public in Taiwan and divert their dissatisfaction with the Anti-Secession Law. As for "public opinion warfare," the PRC, under the guise of a friendly foreign policy that seeks to "enrich, harmonize with and pacify neighboring countries" and, with many opportunities that arise from high-level diplomatic trips, has subliminally misguided international perceptions and, by any means, fabricated reasonable justifications for its "unification by force."

The "three warfares" waged against us by the PRC may be slightly different in terms of the ends and means concerned, but when used interchangeably, they all aim to shake our armed forces'



aiwan's All-out Defense - Establishing an Awareness for Potential Crisis

In the early years, the PRC, swearing that they would "bloodbath Taiwan," mounted an assault as the KMT government in Taiwan had not fully stabilized. At that time, the entire nation's military and civilians agreed to repel the PRC at all costs, and harnessed unified and valiant morale amongst themselves to defeat invading forces. That we won the Gu Ning To victory and established half a century of stable development in Taiwan owed itself to the key factor of our determination to "live or perish with the island,"

Half a century ago, we won in Gu Ning To and the battle of August 23, which not only destroyed the PRC's intention of invading Kinmen and Matzu and "militarily liberating" Taiwan, it also revealed to the world the PRC's military and expansionary ambitions. There is an ancient saying, "those who forget war will be in danger." This means that if any nation becomes complacent and ignores enemy threats, it is liable to perish. The violent experience from those before us told us that only by promoting the spirit of living and suffering together and raising awareness for potential crisis are we able to attain the greatest protection for national survival, development and the people's well-being.

At the same time, for the PRC offensive moves that stresses "winning a campaign in remote areas quickly, winning the first campaign decisively", there is no distinction between frontline and rear area, servicemen and civilians. Everyone should take military and civilian as a whole, safeguarding national security. All should fight against the enemy and protect our homes together. Only by raising the public's awareness of potential crisis, establishing consensus on all-out defense and supporting the military establishment can the PRC's military incursions against Taiwan be prevented, which will, in turn, solidify national security.

# 3. Responsibility of National Security

National security requires solid armed forces and the protection of strong national defense power. The most important factor to achieve this goal lies in the foundation of unanimous support from the public. Ever since martial law was rescinded in Taiwan, the social atmosphere has

Concept and Visionof All-out Defense changed. Travel between Taiwan and the PRC is now frequent, and the general public has become desensitized in their awareness of the military threat. This has made many people in Taiwan forget that they are still in a "political and military standoff" and lack crisis awareness regarding national security, not knowing that the PRC is a constant threat to Taiwan in many different ways.

Therefore, all-out defense plays a very important role in maintaining national security; establishing awareness of all-out defense cannot afford any delay. However, in attempting to develop strong defense capabilities to ensure national security, not only do servicemen need to maximize their tangible combat capabilities, the entire population also needs to harness intangible psychological combat capabilities in order to prevent the nation from being defeated.

National Defense Report

# **II. Strengthening Belief in All-out Defense**



1. Confidence in All-out Defense

Total mobilization of the all-inclusive defense is to put all-out defense into practice. To achieve all-out defense, the government has tabled the National Defense Act and the Act of All-out Defense Mobilization Preparation (Refer to Appendix 10-1, Administrative Conference System for All-out Defense Mobilization Preparation). We have followed the principle of "incorporating mobilization in policy implementation and assimilating combat readiness in economic infrastructure" and gradually established a new mobilization framework that can efficiently support military operation and also address basic civilian needs to satisfy all-out defense needs and thus solidify national security. All-out defense is implemented through the following areas:

#### (1) Awareness of All-out Defense through Education

Through school, social and community education, and implementation of on-the-job training from government agencies, the public can assess and recognize national and political values. And, through this consensus, we can enhance confidence and the overall quality of the public, and consolidate their psychological defense powers. Therefore, the MND actively promotes national defense education by designating each September 3 to be the all-out defense education day and coordinating various education plans and relevant activities in accordance with Article 6 of the All-out Defense Education Act: "The Legislative Yuan shall designate an All-out Defense Education Day and hold relevant events to enhance all-out defense education."

# (2) Incorporate Civil Defense Organizations to Maintain Awareness of Potential Crisis

Civil defense organizations are mandated to protect our homes, properties, and assist in the



Switzerland's All-out Defense - Determination for All-out Defense Mobilization

Switzerland is renowned for its long history of neutrality. It is located in central Europe and was frequently coveted by surrounding powerful nations. But since the 19th century, it was able to keep its citizens away from several major wars in Europe, and this was not because of mere luck. Analyses show that a major factor lied in a defense policy that fuses military and civilian elements and delegates military power to the general public, harnessing high levels of defense powers as a result, Aggressors will thus consider the costs of invasion and hold their fire. During World War II, Hitler's army planned to annex Switzerland after conquering France. However, at that time, the German military observed the depth of Switzerland's all-out defense and concentrated morale combat powers, and estimated that an invasion of Switzerland would cost at least 1 million casualties. It then cancelled any plans of such invasions after weighing the costs and benefits.

In the case of Swiss all-out defense, we can understand that the depth of Switzerland's all-out defense and concentrated morale combat power were built on the foundation of consensus on all-out defense and independence, which ensured national security. This is a policy that should be adopted by the ROC.

maintenance of security. If they can hold the support and participation from the public during peacetime, they will be able to adequately support military operations in wartime. Therefore, our objectives will be to incorporate civilian organizations to encourage public morale, support military developments and combat preparation, maintain a constant awareness for potential crisis and readily train for and develop civilian defense capabilities. These will facilitate military defense and form a complete intersupportive framework between military and civil defense.

# (3) Apply Reserve Troop Organizations to Consolidate Consensus for All-out Defense

Currently, every municipality has a reserve soldiers assistance center, which, in peacetime, focuses on service work and provides comradeship for the veterans and assistance in needed. In wartime, they can become the foundation for psychological mobilization. Also, peacetime connections and services can improve

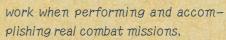
wartime performance in mobilization, disaster relief, propagation, social order and security work.

# 2. Significance of Morale Combat Power

Actualizing morale combat capability is a prerequisite for all-out defense and is equally important to soldiers and civilians alike in peacetime and wartime. Especially for a country that has never stepped away from the threats of war, we need to spiritually harness a awareness for potential crisis to coalesce the general public to defend against hostile threats, understand and recognize the impor-

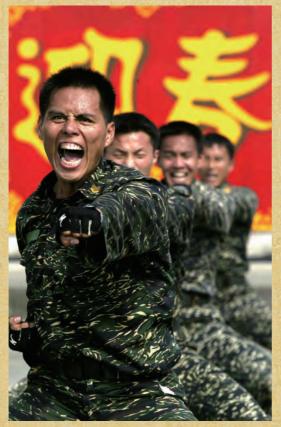
Oun Tzu, the ancient Chinese military thinker, had unique beliefs on harnessing military morale combat power. He believed that leaders should demonstrate exemplary behavior, instruct and test their troops on a personal basis, be the first to enter combat, and exercise courage and decisiveness so as to harness team spirit among their troops.

Sun Tzu's Art of War stated, "Regard your soldiers as your children, and they will follow you into the deepest valleys; look upon them as your own beloved sons, and they will stand by you even unto death. If, however, you are indulgent, but unable to make your authority felt; kind-hearted, but unable to enforce your commands; and incapable, moreover, of quelling disorder: then your soldiers may act like spoilt children; they are useless for any practical purpose," and also, "The Moral Law causes the people to be in complete accord with their ruler, so that they will follow him regardless of their lives, undismayed by any danger." This clearly illustrated that leaders need to exercise leadership through compassion and discipline to develop sufficient combat coordination skills and a family-like bond among the troops. They will then be able to exercise the maximum combat power through team-



The Prussian military thinker, Karl Von Clausewitz's greatest contribution to war theories is his emphasis on psychological factors, such as his belief that the human "spirit" is more important than concepts of war fronts and operational angles.

The British military thinker, B. H. Liddell Hart, creator of "Strategy," emphasized that strategy needs to understand effective national mobilization of national economic and human resources, and also adequately account for the national morale power (i.e. educating the public to develop high degrees of morale capacity). It is therefore evident that enhancements in national morale capacities and qualities have significant effects on war.



tance of all-out defense and invest national resources into the defense establishment in order to be able to command strong combat capabilities in times of war. This is the most practical method of war prevention and ensuring national security through deterrents.

# 3. Benefits from Self-dependence and Self-help

Our national defense principle focuses on preparation for, prevention of, and elimination of war. Our national defense position is to avoid war by preparing for it. To achieve this goal, we need to recognize the only power to deter war and attain peace. Modernized defense is geared towards building a multi-dimensional, comprehensive and trustworthy defense with unanimous participation of the public. Only by harnessing consensus on all-out defense, utilizing the nation's complete combat powers and developing independent and confident defense infrastructures can we consolidate a self-sufficient defense force.

National Defense Report

# III. Building an All-dimensional National Defense



#### 1. Political Establishment as Foundation

Democracy, freedom and human rights are basic values of Taiwan's foundation. Comprehensive democracy requires comprehensive defense. An impeccable defense mechanism is important for the protection of Taiwan's constitutional democratic system. Based on the value of constitutional democracy, legislation must be adopted to boost a sound defense system. After the National Defense Act and the Organization Act of the Ministry of National Defense took effect on March 1, 2002, "consolidation of military policy and command branches" has democratized and legalized the national defense system, ensured civilian control of the military and clarified jurisdictions, thus ushering in a new era for Taiwan's defense system. This important result indicates that the early stages of Taiwan's objectives in modernizing its defense establishment are completed.

#### 2. Economic Establishment as Backbone

Overall national defense power relies on strong economic capacity as its backbone. Economic and national defense infrastructures are complementary to each other. Only a strong economic establishment can support higher defense needs and boost investment confidence among the general public and foreign investors to highly correlate with each other. The two are thus a strong cause and effect of one another. Therefore, a strong economic establishment is the backbone for defense, and national defense power is the guarantee for economic establishment.

#### 3. Psychological Establishment as Driving Force

All-out defense is based on constitutional, military, economic, and psychological establishments. Peacetime training and military reserves from the public are meant to combine civilian with military elements, so that in times of war, we can encourage all-inclusive participation to achieve all-out defense. Therefore, in observing that all-out defense particularly emphasizes psychological strength, intangible defense and trust from the people, consolidation of mental defense or establishing consensus or participation all rely on the application of education and public relations from the national defense agencies. For all-inclusive participation during wartime, we require effective application of manpower, financial and material resources. This requires group coordination, so that the application of ideological warfare, mass warfare and organizational warfare are the driving forces of psychological strength for all-out defense.

# 4. Military Establishment as the Core

In recent years, the armed forces have dedicated themselves to developing the modernization of defense capabilities and continued pushing for military refinement policies aimed at building armed forces with adequate numbers, high quality and strong combat power. We understand that only refinements and consolidations in the armed forces' combat capabilities and preparations can guarantee victory over the enemy for national security. National security is not merely a duty of government policy; it is more closely connected to the entire military and civilian establishment. As the proverb says, "God helps those who help themselves." Under the defense policy guideline of "war prevention, homeland defense, counter-terroism and contingency response," the ROC Armed Forces have planned several major military procurements, which are not aimed at engaging in an arms race against the PRC, but are to enhance our own defensive and war-deterring capabilities. In light of the current urgency for military developments in national defense, unanimous military and civilian support are especially required to take the principles of all-out defense into practice.

# 5. Technological Research as Guidance

Facing current and future defense challenges, along with necessary military procurement from external sources, our nation's own defense technology research and development is also commissioned to drive and enhance overall combat power. In response to the PRC's escalating military threats and changes in the nature of combat, such as information warfare, precision strikes, etc., the armed forces are in urgent need of high-tech defense establishments to enhance self defensive capabilities. Under the current armament management system, the MND will integrate more comprehensive and effective defense technology research management institutions to accelerate the participation of defense technology research from industrial, academic and research communities. Then, the





At the founding of Israel, there was already a military policy that maintained strong reserve troops in addition to its regular troops. Reserve troops even became the main body of the Israeli military. Reserve mobilization became the core of Israel's allout defense. Other than mobilization of combatant, logistical support mobilization was also an important factor to the success of mobilization. Each level of the Israeli government's industrial and transportation departments, local industries, hospitals and schools all have detailed mobilization plans, allowing all personnel and resources to be included.

In the fourth Middle East war in 1973, Israel had sent 400,000 troops to the front line after 48 hours of mobilization, and among more than 1 thousand tanks destroyed, more than 700 were repaired in 10 days. This mobilization efficiency ultimately ensured the security of Israel. That Israel can maintain stable development amidst the surveillance of large enemy forces is, at least in part, due to the development of awareness for all-out defense.

From the case study of Israel's all-out defense, we can see the Israelis' support for an all-out defense consensus. They have high regard for the government, for supporting defense mobilization policies and for participating in defense establishment and their executions thereof, which guarantee national security.

MND will assist the industries to build on research results to promote the marketing of subsequent manufacture of military products to military agencies. This can bring about more business opportunities, fulfill modern citizen's responsibilities, and ensure shared participation in national defense construction and sustained national security.

All-out defense is a concept that the government has been actively promoting in recent years. The basic principle is to raise the public's awareness for potential crisis, harness solid willpower to protect the nation, actively participate in the national defense construction and solidify national defense powers. The spirit of all-out defense is to apply tangible and intangible resources from the public to increase defense powers, deter the enemy and ensure national security. Because Taiwan-Penghu defense operations are of a defensive nature, if war breaks out in the future, there will be no distinction between military and civilian. Everyone resisting the enemy together is a must. Victory means survival of nationhood; defeat means the opposite. The military and the civilian will live together or perish. Therefore, we should establish comprehensive all-out defense systems early on through legislations and integration with political, economic, military and psychological elements, and strive for common causes in order to truly realize all-out defense.

Facing the current environment, building consensus for all-out defense cannot be delayed. The foundation of all-out defense is decided by socio-military relations. Only through healthy civil-military relations can the foundation be set for long-term national peace. Future developments on socio-military interactions will be based on all-out defense principles. Conceptually, we will continue to incorporate majority public opinions with an open approach. Methodically, we will include abundant civilian resources into the national defense system, incorporate multi-partisan powers, actualize all-out defense principles and enhance overall national combat power.



# Defense Industrial Cooperation Program Military Civilian Transferable Technology III- Building Defense Industrial Base V. Base Realignment Planning V. Civil Support Operation After the promulgation of the Two Defense Acts, concepts and applications of the planning and utilization of defense resources have changed drastically from the

After the promulgation of the Two Defense Acts, concepts and applications of the planning and utilization of defense resources have changed drastically from the past. The MND will effectively utilize industrial, government, academic and research-related resources based on national security needs, industrial capacities and future armament developments in accordance with the execution of defense affairs. It will enhance resource integration, academic research, technological innovations and developments and be actively involved in the research and production of defense weapon systems. We will release defense resources to the private sector to fulfill the philosophy of an all-out defense and achieve the goal of enhancing the nation's overall industrial competitiveness and penetrate any economic development bottlenecks to create innovative competitive edge. This will be a strong foundation for our defense transformation efforts and creating win-win situations for both the civilian and the military communities.

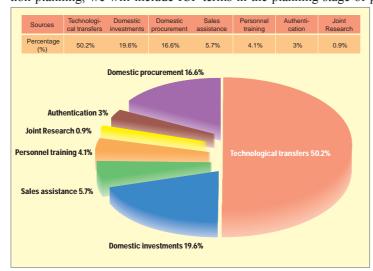
Additionally, we must address concerns from both "defense security" and "social needs" perspectives when facing the nation's needs for political and economic developments. We will incorporate the combat capabilities and deployments provided by the Jingjin Program and fully assess the overall efficiency in the utilization of military real estate under the condition that such actions do not impose any adverse impact on our combat readiness. We will fully support the needs of our society. Through adequate daily military-civilian interaction and communication, we can strengthen the trust between the military and civilian community to harness the propensity of our people and enhance the nation's overall defense capabilities.

#### **I. Defense Industrial Cooperation Program**



Internationally, Industrial Cooperation Programs (ICP) are government acquisitions that require foreign contractors to perform technology transfers, domestic acquisitions and investments, cooperative research, personnel training, international sales and other such activities with reversed reciprocal benefits amounting to a certain percentage of the procurement contract overall value, in order to promote the nation's industrial and commercial developments. Concrete benefits from such activities can accelerate developments of domestic industries and lower life-cycle costs of the weapon systems and ensure capabilities for future equipment maintenance.

In stimulating the private investment plan within the overall government economic revitalization planning, we will include ICP terms in the planning stage of procurement programs under the



△ Figure 11-1 Categorized statistics of the application of Taiwan's ICP credits

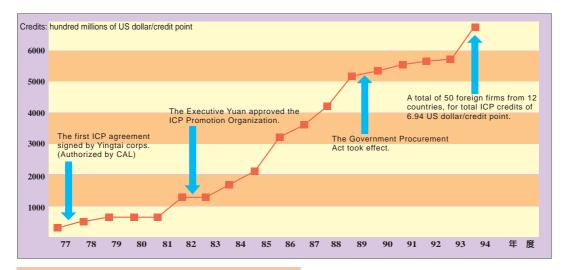
S dollar/credit point: when governments use foreign purchase opportunities to demand that foreign contractors provide a certain ratio of the purchase contract's total value in order to engage in reversed reciprocal benefit activities in the country, the converted value of this proportion is called the "industrial cooperation credit", which is measured in "US dollar/credit point", which is not an actual currency, but, rather, "promised values."

condition that such terms will not impact the acquisition of military goods. The purpose is to build domestic industrial capabilities and thoroughly elevate the domestic industries and technology level. (Refer to Figure 11-1, Categorized statistics of the application of Taiwan's ICP credits)

### 1. Sources of ICP Credits and Execution Results

ICP credits are managed by the Ministry of Economic Affairs and distributed to various domestic government agencies and private firms after negotiations within the inter-departmental Executive Committee for Industrial Cooperation Programs. From 1988 to 2005, major foreign purchases from govern-

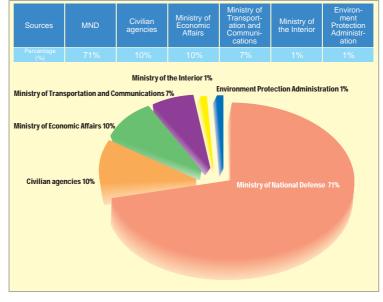
Interdependence of Defense and Society



△ Figure 11-2 Total Acquired ICP Credits in Recent Years

ment departments and private sectors involved signing over 80 industrial cooperation contracts with over 50 international corporations in 12 countries, including the United States (US), receiving approximately 6.94 billion US dollar/credit point. There have been concrete results in building ICP operational mechanisms, target setting, regulation implementation, industrial rewards policies and scheduled progress (Refer to Figure 11-2, Total Acquired ICP Credits in Recent Years). Defense procurement contracts have provided 4.9 billion US dollar/credit point in ICP credit, totaling 71% of total credits (Refer to Figure 11-3, Sources of ROC ICP Credits [by Ministry]). The ROC Armed Forces have used this feedback mechanism to receive over 30 implementation benefits, represent-

ing 23% of Taiwan's total received credits (Refer to Figure 11-4, Utilization [by Sector] of ICP Credits in Taiwan). Most of the credits are used in domestic industries to enhance industrial competitiveness. They can also be directly applied to defense technology research plans, which are beneficial for raising the country's domestic technological profile. Therefore, not only inte-



△ Figure 11-3 Sources of ROC ICP Credits (by Ministry)



△ Figure 11-4 Utilization (by Sector) of ICP Credits in Taiwan

Military

grated with military transformation and enhancing combat capabilities, ICP also catalyze industrial, economic and social prosperity, making it an optimum opportunity for the prospective domestic firms.

# 2. ICP Planning for Major Defense Acquisition Programs and Expected Benefits

The MND conducts ICP planning of major military procurements based on

Article 22 of the National Defense Act, "When it is necessary to pursue external procurement, the acquisition activities shall realize technology transfer policy..." and the guidance of "ICP credits from defense procurements must be utilized in defense" by the Legislative Yuan. ICP credits planning, utilization and expected benefits of major military procurement programs are stated as follows:

Academic

- (1) In May 2004, the Executive Yuan approved three major military investment plans for PAC-3 air defense missile system, P-3C long-range fixed-wing ASW aircraft and diesel-electric submarines. The designated ICP credits for each individual investment are 50% for the PAC-3 air defense missile system, 70% for the P-3C long-range fixed-wing ASW aircraft and 40% for the diesel-electric submarines. The MND has completed the assessment of ICP requirement items based on the actual needs and the expected benefits will be in further enhancements of our defense technology capacities.
- (2) If the three major military acquisitions successfully enter the procurement stage, it is expected to generate over 6 billion US dollar/credit point in commercial opportunities, which is approximately equal to the accrued ICP credits since 1988. The credits will first be assigned for defense industry development. Remaining credits can be applied to national strategic technology industries such as aerospace, shipbuilding, information and communications, medicine, biotechnology and other high value-added key industries. If appropriately managed, the ICP credits produced by these three military contracts can overwhelmingly stimulate the domestic economy.
- (3) To properly utilize the designated 70% ICP credits of the Po-Sheng Program (approximately 749 million US dollar/credit point), the execution of the ICP program will be carried out using the protégé strategy. The prime contractor will cooperate with major domestic communication firms which will lead other smaller subcontractors to form industrial clusters for the defense industry. This strategy will facilitate the integration of capacities from defense technology industrial organizations

and domestic communications and information technology industries and set the foundation for the design, integration development and employment of large C<sup>4</sup>ISR systems. The leverage values provided by the large amount of ICP credits in the future can elevate domestic defense technology capabilities and accelerate development of armament systems compatible with the existing industries. We are optimistic with the future development of Taiwan's defense industry.

#### 3. Future Emphasis

According to the MND's ICP operation regulation, it requires at least 40% or above ICP credit feedbacks, in each military investment case which exceeds \$5million. To efficiently utilize ICP credits and ensure foreign contractors' fulfilling their ICP promises, MND will be involved in the overall ICP planning as soon as the military acquisition procedures start. All units within the ROC Armed Forces are prohibited from signing any FMS (Foreign Military Sales) Letter of Offer and Acceptance (LOA) or commercial contracts unless they obtain a signed Letter of Undertaking between the Ministry of Economic Affairs and the prime contractor has been obtained. The above condition can only be ignored if the signing of the Letter of Undertaking severely affects the schedule of the acquisition. The legal binding of the Letter of Undertaking will ensure foreign contractors enforce their commitments and the proper execution of the ICP benefits. In the meantime, the MND will devise "ICP integration mechanisms" jointly with the Ministry of Economic Affairs and establish databases of required items to increase execution efficiency. Planned future developments include:

#### (1) Increase Percentage Allocation of Technology Transfers

The acquisition of key technologies is critical in constructing a self reliant defense and industrial technology upgrades. Defense policy is to continue the gradual increase of percentage in technology transfer to aid domestic defense industrial organizations in acquiring and developing key technologies.

#### (2) Assist Domestic Firms in Establishing Relevant Maintenance Capacities

In the future, the ROC Armed Forces will focus on developing and maintaining core capacities and gradually rely on the private sector to promote defense technology industries. Therefore, when maintenance of certain weapon system is deemed to be more effective than contracted out to private firms, we will use ICP opportunities to demand that foreign contractors assist domestic firms in establishing relevant weapon systems repair capabilities. The goal is to stimulate enhancements in personnel, technology and equipment capacities and enhance research, manufacture and repair capabilities of military equipment in Taiwan.

## (3) Acquire Relevant Technologies and Management Knowledge through Cooperative Production with Contractors

Recent international trends in ICP execution are leaning toward joint ventures or cooperative



production. Contractors' intent for cooperative production will be strengthened through measures such as market development, labor costs and subsequent demands while buyers can acquire product-specific technologies or develop related products. Therefore, we intend to introduce important technologies through cooperative production models and thereby enhance the technology levels of domestic industries.

#### (4) Obtain Integration Technologies through Shared Research

Shared research is an effective strategy in procuring design and system integration technologies, but usually at a greater cost to the buyers. If shared research is carried out through an ICP, contractors' costs can be partly covered by the reversed reciprocal ICP benefits. Therefore, it allows us to procure important design knowledge and system integration technologies from original foreign contractors and dramatically lower relevant domestic costs of industrial research and development.

#### (5) Enhance Research Capacity to Gain Leverage in Key Technology Interchange

Weapons systems acquisitions of the ROC are carried out simultaneously through channels of R&D and procurement. Normally, when our capability in certain technology reaches a certain threshold, our chances of acquiring weapon systems using related technologies will be higher. Therefore, we will continue our focus on raising research capacities and to capitalize on ICP opportunities, in hopes of establishing bargains to exchange key technologies or purchasing advanced weapon systems.

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#### II. Military-Civilian Transferable Technology



Modern technologies have significant influence over national security and the economy. To achieve scopes and economies of scale, a reasonable and necessary approach is making research on military and civilian transferable technology one of our major technology development strategies, especially when dealing with the recent government budgetary shortfalls and increasing costs of research on military equipment.

#### 1. Planning Concept

Defense industry is an important indicator of industrial capability for modern nations. Furthermore, the defense industry possesses characteristics of technology-centric, high value-added and broad industrial connectivity. For many years, research in Taiwan's defense industry involved little direct participation from domestic private companies due to the demands for high quality but low

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quantity goods. In recent years, defense budgets have gradually decreased. The MND still needs to develop portions of weapon systems and equipment required by the individual services under the budget constraints to replenish or replace deficiencies in weapons procured from the international market. In order to lower costs, it has become necessary to support military equipment manufacture by domestic private sectors. To capitalize on the private sector's high efficiency and low costs, the Chung-shan Institute of Science and Technology (CSIST) under the MND's Armaments Bureau will provide assistance in design and quality control. By encouraging technology enhancements in private sector industries through joint cooperation, we can establish a more self-reliant defense industry for the nation. It can also integrate and provide more weapons systems equipment needed by the ROC Armed Forces due to the lowered production costs and shortened R&D schedules.

#### 2. Past Accomplishments

#### (1) Professional Technology Service and Promotion

The CSIST will open its three campuses in Taichung, Chingshan and Longyuan to provide and facilitate comprehensive dual-use technologies. The Taichung and Longyuan campuses provide innovation and incubation centers to participating companies. The Longyuan campus is currently working with the Ministry of Transportation and Communications in the "Taoyuan-Longyuan Mobile Communications Center" project and has currently registered 33 companies. Over 2,000 people visited the campuses annually in 2004 and 2005 and there have been over 100 technology R&D workshops. There are, on average, some 400 technology service contracts and cooperation plans valued at approximately NT\$ 100 million. Using the research manpower and environment in Longyuan as incentives, we are actively recruiting companies to setup in the research park and successfully forming an industrial cluster. Currently, we have signed a strategic partnership with the Longtan Hope Campus to develop the Longtan Twin Star Project. In the future, we will actively integrate with surrounding technology and industrial parks to form a complete value chain from research, development, production, and testing to final certification. These efforts will provide further assistance in the formation of the defense industry cluster.

#### (2) Technology Development Programs

From 2002 to 2005, CSIST has accumulated 537 academic and industrial cooperation and technology transfer projects, 403 patent applications, 255 patents, 58 patented applications and 200 items involved in private business investments. CSIST successfully led industry to invest approximately NT\$ 9 billion, resulting in a production value of over NT\$ 30 billion. There are over 40 instances of privatization in traditional, high-tech and defense industries. (Refer to Appendix 11-1, Case Studies of Industrial Results from Specialized Technological Projects Coordinated with the Ministry of Economic Affairs)

echnology Development Programs; CSIST, under the Armaments Bureau, participates in the Ministry of Economic Affairs' Technology Development Programs, where they apply their experiences in defense technology research and system integration to assist traditional industries and small and medium businesses in upgrading and transformation, Combine with existing niches in the development of civilian products with economic in scales, and assist companies in the research and manufacture of military goods. This will assist in execution of policies such as the "National Establishment Plan" and the "Economic Stimulation Project," Through expansions and exchanges in military and civilian dual-use technology capabilities, military and civilian technologies can mutually complement each other to establish an all-out defense system and catalyze overall national economic developments.

# (3) Establishing System of Central-Satellite Factories for Defense Industries

An MND project cooperated with the Ministry of Economic Affairs established the "Joint Development Bulletin of Public and Private Military Industries." Through open channels of research, sampling and production certification of military equipment, we have established 283 certified firms for manufacturing and repairing military products and 5,492 types of military equipment. The estimated accumulated commercial value is approximately NT\$18 billion. This will be directly benefit stimulating the domestic economy and increasing internal demand.

#### (4) Results from the 2005 Taipei International Invention Show and Technomart

The 2005 Taipei International Invention Show and Technomart was held in coordination with the Ministry of Economic Affairs, with nine major themes: bicycles, wafer grinding and manufacturing, automotive safety devices, self-service printing devices, photo-catalysts and paints, fireproof materials, unmanned aircraft, military and police dual-use devices and firefighting equipment, nanotechnology microstructures and medicine-producing methodologies. There were an estimated 159 patents and results from Technology Development Programs deemed to be commercially valuable. We assist in the enhancement of industrial capabilities by transferring these technology capacities to the industries.

#### 3. Future Development Plans

We will continue our cooperation with the Ministry of Economic Affairs' dual-use technology development program privatization plans to assist domestic firms in technology research and innovations, expand operational efficiencies of industrial service and catalyze formation of defense industry clusters. We will also form strategic partnerships with relevant domestic research and academic organizations and industry firms. Through assistance from external capacities in search

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riangle Military and civilian transferable technology is one of the major strategies in national technology development

of partnerships for cooperation, we will improve mutual capabilities to create win-win situations. We will establish spin-off companies according to plan and aggressively assess every possible case. We will devise business strategies, models and courses of action; vitalize organizational functions and manpower utilization of the MND's technology research division. This will quickly raise our industrial technology levels and accelerate developments in industries required by the ROC Armed Forces. We will also establish international cooperation, actively expand and form strategic partnerships with foreign agencies, and enhance our overall competitiveness.

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#### **III. Building Defense Industrial Base**

In the early days, the ROC Armed Forces needed to maintain self-reliant capacities for combat readiness due to lack of domestic technology capabilities and funding. However, with changes in strategic thinking and technology advancements, there is an urgent need to integrate with the private sector to modernize national defense to maximize the application efficiency of the nation's overall resources. Therefore, the MND has adhered to the spirit of the Two Defense Acts and completed various privatization plans of national defense resources and relevant measures according to the Executive Yuan's policy of expanding domestic needs and market stimulation. We will strive to complete

planning and relevant measures to privatize national defense resources so that it is from the people and for the people. We will inject demands to the domestic markets through these privatization efforts to improve technology levels. Also, Taiwan's private sector has made notable progress on developments in information, communications and electronics reaching international levels. Therefore, we will capitalize on this niche, combine private sector capabilities into defense and strive for a self-reliant defense, in the hopes of creating an all-out defense with popular backing from our society.

#### 1. Strategic Planning of Privatization

Planning for the privatization of defense resources is based on the concept of increasing the percentage of defense budgets to be used in domestic industries, which can effectively increase incentive for private sector participation in the defense establishment and assist industrial and economic developments nationally. Other than continuing to direct general military demands to domestic markets, non-core maintenance capacities for existing weapons will all be privatized. The ROC Armed Forces itself will not establish any capacities. If new weapons systems can be manufactured by the private sector, international sources will not be considered. We will strive for lower military engagements, lower foreign procurement expenditures and increased privatization budgets to adjust deployment of national defense resources, in order to increase domestic privatization.

#### 2. Implementation Results

Since 2002, we were generally able to satisfy our privatization goals. In 2005, we also achieved our privatization goal of NT\$ 59.9 billion and we will strive to complete the following major long-term privatization projects:

#### (1) Research and manufacture of military aircraft

Based on the IDF fighter jet, the Aerospace Industrial Development Corporation has been contracted to carry out projects to improve fuel capacity, pilot control, electronic warfare and self-defense capabilities, etc. Annual privatization from 2001 to 2007 is expected to be valued at over NT\$1 billion.

#### (2) Manufacture of large guided missile speedboats

Construction for 30 new speedboats is planned to replace existing vessels. Annual privatization from 2005 to 2010 is expected to be valued at over NT\$4.3 billion.

#### (3) Light and medium armored vehicles

Production for 9000 units is planned. Annual privatization from 2004 to 2009 is expected to be valued at over NT\$ 3 billion.

#### (4) Manufacture and maintenance of frequency-hopping radios

Manufacture for more than 15,000 units is planned. Annual privatization from 2004 to 2009 is

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expected to be valued at over NT\$1.7 billion.

#### (5) Strategic commercial maintenance of military aircrafts

Complete outsourcing for commercial maintenance is planned for nineteen items including the ATEC5000 avionics test platform. Two additional items, including F-16s, will have complete commercial maintenance arrangements prior to the end of 2006. Annual privatization from 2003 to 2011 is expected to be valued at over NT\$3.5 billion.

#### (6) Strategic commercial maintenance of military warships

Complete trial run for commercial maintenance on three types of warships including the Cheng Kung class frigate. Privatization value is expected to be more than NT\$ 2 billion.

#### 3. Direction of Future Executions

#### (1) Encourage domestic research and manufacture of military equipment

The Major Equipment programming procedure for weapon system acquisition will be modified with joint development of the "Regulation for evaluation of military equipment acquisition through domestic production capacity" by the MND and Ministry of Economic Affairs. Any weapons that can be manufactured domestically will not be procured from foreign sources.

#### (2) Enhance ICPs from foreign procurement

To ensure the transferring of key technologies and upgrade the level of domestic defense technology industry developments, foreign purchase contracts over US\$ 5 millions will require the signing of ICP Letter of Undertaking by the primary contractor for obligation of ICP tasks. The emphasis will be on technology transfer to domestic firms focusing on subsequent research, production, maintenance and repair capacities as major ICP items.

#### (3) Continue pushing for strategic commercial maintenance

The ROC Armed Forces will continue the overall planning for commercial maintenance of military aircraft and warships with accelerated planning on the push for land-based military equipment commercial maintenance. The aim is to establish long-term commercial maintenance partnerships with domestic firms.

# (4) Government-owned and contractor-operated (GOCO) transformation of military factories

The MND has completed the GOCO transformation of the 302 military outfits manufacturing factory of the Armament Bureau and the aircraft maintenance plant of the Air Force 2<sup>nd</sup> Logistics Area Command. In the future, we will still focus on privatizations of low-sensitivity but highly dual-usable military factories (e.g. Waste Ammunition Processing Centers of Combined Logistics and Printing Presses of the Armaments Bureau, etc.) based on the results of the privatization efforts.

#### (5) Develop dual-use technologies



We will integrate technology superiorities from the private sectors including advanced technologies in information, electronics and mechanical engineering, etc. and expand dual-use technology programs. We will transfer technologies to firms allocated in the CSIST's campuses and accelerate strategic partnerships between CSIST and the private sector to form spin-off companies. This will fulfill the purpose of military-civilian interchanges and enhance the country's overall technology capabilities.

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#### **IV. Base Realignment Planning**



In the process of integrating the restructuring of overall military manpower and the yields from nation-wide land development, issues such as base utilization, construction of training grounds and building restrictions in military zones have impacted the developments of local communities. For balance in developments of national security, regional developments and social needs, based on the concept of "nurturing combat readiness in economic development," the MND has reevaluated the utilization of military estate under the condition of minimum national security requirements and zero impacts on combat readiness. Adequate adjustments have been made on military deployment and facilities with diminishing restricted construction zones. We will base our planning on the three dimensions of "reassessing and consolidating camps," "overall planning of training grounds" and "reassessment of outpost and restricted military construction zones." Comprehensive assessments on the efficiencies of the overall utilization of military real estate will be conducted to promote regional economic prosperity, encourage urban development, protect citizens' legal rights and fully integrate the military with the society.

#### 1. Implementation Concept

Based on the principle of striving for consistency between peacetime and war time, we will integrate prioritized defense objectives and training grounds and reassess and merge all small training grounds through the guidelines of "merging small camps with large ones" and "one base for all three services." We will also focus on building and development of suitable joint service training grounds. Those with no combat readiness impacts will be evaluated for deregulation or relinquishment.

#### 2. Planning Goals

The plan is separated into three stages within 5-year from the start of the planning till the end of 2009. More than 2,026 hectares of land will be released and more than 2,937 hectares will be

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deregulated. (Refer to Figure 11-5, Overall Planning on the Utilization, Release and Deregulation of Military Real Estate)

Stages	Camps	Training Grounds	Outposts and Restricted Areas	
Short term	171 locations	23 locations	6 locations	
(before 2005)	328.39 Hectares	153.7 Hectares	1003.3722 Hectares	
Mid-term	307 locations	47 locations	31 locations	
(before 2007)	555.76 Hectares	204.16 Hectares	1934.1078 Hectares	
Long term	131 locations	15 locations	0 locations	
(before 2009)	528.88 Hectares	219.49 Hectares	0 Hectares	
Total	694 locations 2026.38 Hectares		37 locations 2937.48 Hectares	

△ Figure 11-5 Overall Planning on the Utilization, Release and Deregulation of Military Real Estate

#### 3. Expected Benefits

- (1) The MND has requested all area commands (defense commands, garrison commands) to assess prioritized defense objectives within their areas of responsibilities in case of domestic emergency responses (anti-terror) incidents and implement prioritized defense preparation missions for sensitive areas that may be critical to the overall national security. Mission preparations have been completed to drastically increase our domestic emergency response capabilities and benefit the government's anti-terror efforts.
- (2) There are 694 relinquished bases occupying 2,026 hectares of land. They will be returned to their previous owners or local governments, or through the legal procedure "transfer" to the National Property Bureau to allow efficient land use. Resultant benefits can improve the finances of the nation, support military buildup and combat readiness and increase overall combat capabilities of the ROC Armed Forces.
- (3) After releasing 45 small training grounds, we can effectively eliminate civil complaints and address the issue of local developments. The completion of large joint training grounds in the northern, central and southern regions in the future will be benefit the development of universal, modernized, mechanized and standardized training, creating multiple win-win situations for the government, regional districts and the ROC Armed Forces.
- (4) After the ease of building restrictions near important military facilities, there will be 2,937.48 hectares of deregulated lands effectively ensuring the legal rights of our citizens, encouraging regional developments and addressing the needs of major national developments and defense needs.



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#### **V. Civil Support Operation**



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Defense affairs execution is part of the overall government policy. Therefore, the ROC Armed Forces are closely connected with the society. In terms of all-out defense, the key is the gathering of public opinion and the utilization of the morale of our citizens. In terms of social development, military personnel and resources can provide timely and needed support for our society which is especially important for disaster relief or disease prevention as long as combat readiness is not compromised. Therefore, peacetime military-civilian interactions and sufficient information interchange can establish a military-civilian operational model and increase the recognition and support of our citizens toward defense affairs.

#### 1. Disaster Relief

#### (1) Policy Planning

To strengthen disaster relief mechanisms and functions, the ROC Armed Forces will deploy military assistance when major disasters occur in accordance with the provisions in the Disaster Prevention and Response Act and the Application Procedure for Requesting Armed Forces Disaster



△ The armed forces engages in disaster relief at the first available opportunity

Relief. The ROC Armed Forces will conduct disaster support duty in the sympathy with the victims as soon as the incidents occur. We will try to limit property damage or personnel casualties of our citizens as long as such disaster relief efforts do not compromise our combat readiness, damage the command and control system of the ROC Armed Forces or overburden their support capacities.

#### (2) Implementation Results

In 2005, the ROC Armed Forces' Disaster Response Center successfully accomplished all missions assigned by the Central Disaster Response Center. It performed 6 major disaster support missions during the 0612 flood, the Haitang, Martha, Terry and Longwang typhoons and 158 generic emergency support missions. It assigned a total of 53,182 personnel, 2,375 vehicles, 708 sorties of aircraft, 253 sets of disinfectors, 125 unit water pumps, 290 vessels and 5 rubber boats to those efforts. It has evacuated 533 refugees, assisted and medicated 889 injured citizens, cleared out 18,105

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From Jan, 1, 2005 to May, 31, 2006

Inoidanta	Days	Disaster Relief Resources Devoted			
Incidents		Personnel	Vehicles	Aircrafts	Boats
0612 Flood	10	10,203	609	0	4
Haitang Hurricane	11	16,623	543	37	0
Martha Hurricane	4	3,107	155	0	1
Terry Hurricane	4	5,238	188	1	0
Longwang Hurricane	3	1,620	263	0	0
Pearl Hurricane	5	226	18	0	0
General Rescue Missions	114	16,165	599	670	285
Total	151	53,182	2,375	708	290

△ Figure 11-6 Major disaster relief missions supported by ROC Armed Forces

tons of waste, cleaned 1,723 km of roads and sewage pipes, pumped out 7.98 million tons of flood water, used 58,050 sandbags, transported 102 tons of civilian material, cleaned 289 classrooms, activity centers, parks and homes for elderly persons living alone, repaired 530 meters of dams, disinfected 146 square kilometers of environment and built 2 Bailey bridges and 1.5 km of makeshift roads. In the future, the ROC Armed Forces will continue assisting all levels of the government and performing various disaster relief works to minimize the losses of disaster-struck regions. Also, to alleviate the greater Taoyuan region's water shortages caused by typhoons, from April 12, 2006, the ROC Armed Forces built the upstream section of Lofu bridge for the Shihmen Reservoir in coordination with the Northern Water Resources Office of the Ministry of Economic Affairs' Water Resources Agency and it was completed by May 18, 2006. It removed 124,465 cubic meters of silt, exceeding original expectations (it removed 50,000 cubic meters of silt before the end of May 2006) by 200%. After completing the Shihmen Reservoir mission, the ROC Armed Forces adequately performed silt removal work in severely silt-damaged areas, as commanded by the fourth conference of the Executive Yuan's Gravel Supply Task Force on May 15, 2006, without compromising troop training and daily operations. (Refer to Figure 11-6, Major disaster relief missions supported by ROC Armed Forces)

#### 2. Maintaining Public Security

(1) Policy Planning



Based on the Criminal Litigation Act, the Regulations on Assigning Law Enforcement Personnel and regulations on military police support, in efforts to assist law enforcement agencies maintain public security, the ROC Armed Forces will strive to be alert at all times, negate damage from disasters, restore order as soon as disturbances happen and prevent subsequent disturbances from occurring. We will join efforts with the police and administrative systems to develop comprehensive early warning functions and setup a foundation for anti-terrorism, to ensure the safety of our society and the nation.

#### (2) Implementation Results

From 2005 till May 31, 2006, we have assisted with 1,173 criminal investigations, arrested 2,154 suspects, captured 354 military deserters, disciplined 13 gangsters, uncovered 63 cases of stowaway Mainlanders, 58 stowaway fugitives, confiscated 206 articles of firearm, 1,715 rounds of ammunition, 212 cases of illegal substances (1,313,872 grams of heroine, 5,880.18 grams of amphetamine, 162.1 grams of marijuana, 145.68 grams of Ecstasy and 268,108.41 grams of ketamine) and prosecuted 376 drug traffickers. In terms of assisting forensic investigations, the Forensic Investigation Center under the Military Police Command has undertaken 4,341 assignments supporting military justice and law enforcement agencies in forensic investigation cases for material evidence. It has made considerable contributions towards maintaining public safety.

#### 3. Environmental Protection

#### (1) Policy Planning

To properly care for the environment and natural resources, we will actively cooperate with resource recycling, treatment and prevention of public pollution, maintenance of biodiversity and sustainable environmental development. The ROC Armed Forces will also enforce relevant environmental and ecological protection in accordance with all pollution prevention and treatment and ecological protection legislation.

#### (2) Implementation Results

#### a. Waste Disposal

We will cooperate with the Promotion Plan for Green Purchases approved by the Executive Yuan and actively promote purchases of certified environmentally safe products. In 2005, expenditures on environmentally safe products shire 83.6% of overall expenditures of the ROC Armed Forces. To improve garbage classification and disposal in the ROC Armed Forces, we have fully cooperated with garbage classification measures and contracted local environmental government agencies or publicly or privately owned waste disposal agencies approved by the Environmental Protection Administration to perform disposal work. We hope that this will decrease waste pollution and maintain environmental quality.

b. Treatment and Prevention of Water Pollution

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We will continue the operation and maintenance of waste (polluted) water treatment facilities in all hospitals, military factories, ports and logistics depots in the ROC Armed Forces to deal with various industrial and civil water pollution to ensure water quality. We will revise the MND's Response Plan for Major Maritime Oil Pollution Incidents in accordance to the Executive Yuan-amended national Emergency Response Plan for Major Maritime Oil Pollution and regularly renew relevant system information for emergency response for major pollution according to the ROC Armed Forces' marine pollution response support capacity to maintain normal operations of communication and response for marine pollution.

#### c. Noise Control

To decrease noise pollution due to military aviation operations, we will strengthen our control on flight training and testing except for emergency combat missions. We will also take environmental flight routes to avoid passing through densely populated areas. On January 1, 2005, the Principles for Managing Aerial Noise Enhancement Funds for Military Airports Provided to county (city) governments by the Ministry of National Defense came into effect. Funding has been budgeted to subsidize county and city governments where the Civil Aviation Authority is located to provide assistance to their noise prevention and treatment efforts.

#### d. Biodiversity

The ROC Armed Forces published the "Promotion of Biodiversity—Treatment and Prevention Plan for Invading Fire Ants" plan and set up communication systems for fire ant activities, military fire ant information websites, and strengthed efforts in fire ant detection, monitoring, treatment and prevention. We also held four training and lecture sessions in the northern, central, southern and eastern regions for biodiversity and fire ant treatment and prevention. We trained 463 instructors to better cooperate with the government's work in warding off fire ants.





is comprehensive in its inclusion of political, military, economic and psychological dimensions. In all, all-out defense is founded on constitutional establishments so as to affirm the public's identification with the country. It is centered on military establishments, which encourage population-wide participation; backed by economic establishments, which harness defense potential; and driven by psychological establishments, which consolidates defense willpower. It builds a solid and overarching defense system to set a foundation for victory.

All-out defense and defense transformation are closely and causally connected. All-out defense is the foundation for defense transformation, whose purpose is to enhance overall combat power centered on all-out defense. Therefore, the success of defense transformation depends on the people's understanding, support and participation. Henceforth, "implementing all-out defense education," "enlisting in professional defense," "formulating reasonable defense budgets" and "carrying out all-out defense mobilization systems" are major methods through which people understand, support and participate in all-out defense. They are also the foundational mental, human resource, financial and material projects that defense transformation needs to engage in.

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#### **I. Implementing All-Out Defense Education**



To improve the people's knowledge and consensus of all-out defense, refine defense developments and ensure national security, the All-Out Defense Education Act was promulgated on February 2, 2005 and was to be implemented within a year of its promulgation. It is not only a major component of all-out defense implementation but is also an effective strategy against the PRC's "three warfares."

All-out defense education consists of 4 categories. They are school education, governmental on-the-job training, social education and protection of defense artifacts, publication and education. The All-Out Defense Education Act designates the MND as the central competent authority with coordination from the Ministry of Education, Central Personnel Administration, Civil Service Protection and Training Commission, Council for Cultural Affairs, Government Information Office and all special municipality and county (city) governments in implementing all-out defense education. The MND had completed the "Implementation Plan for the All-Out Defense Education Act" in July 2005. It also coordinated with all relevant agencies to complete all preparation work for implementation by October of the same year so that implementation could officially commence after the All-Out Defense Education Act came into effect in February 2006.

#### 1. Planning the Implementation of All-Out Defense Education

#### (1) School Education

Safety and disaster prevention education and field trips to military sites, defense artifact museums, or military history parks will be added for junior high schools and elementary schools. In senior and vocational high schools, defense-related political, economic, technological and psychological education with various field trip activities will be added. In universities, defense general knowledge courses will be built; defense security, all-out defense mobilization, cross-strait relations, and defense-related political, economic, technological and psychological education will be added.

#### (2) Governmental On-the-Job Training

Depending on the nature of the civil servant's job, lectures on defense organization, cross-strait relations, military exchanges, defense resources, defense economics, defense technologies, military-civilian matters, social psychology, defense artifacts, disaster prevention education, self defense and defense mobilization will be added.

#### (3) Social Education

For the general public, defense knowledge, civil-military relations, community defense, disaster prevention and safety, self defense education, defense mobilization education will be enhanced.

Participation in Defense

# (4) Protection of Defense Artifacts and propagation

The MND and relevant agencies will gather, maintain and manage military sites, artifacts and facilities that are meaningful for defense education and implement field trips and activities to fulfill educational purposes.

## 2. Major Points of All-Out Defense Education

(1) Article 6 of the All-Out Defense Education Act requests the Executive Yuan to designate an all-out defence education day and conduct relevant activities to enhance all-out defense education. The MND thus held an online poll in June, 2005 to pick a date for the all-out education day. September 3 was the date most widely voted for so the MND suggested the Executive Yuan to designate it as the "all-out defense education day." To expand the scope of various activities in the All-Out Defense Education Act, the MND has also planned Armed Forces Day, expanded various propagation and celebration events, conducted various regional defense education lectures, opened up bases for visitors, and performed vessel, fighter plane and equipment demonstrations.







\(\text{Propagation & education will improve the people's knowledge and awareness for all-out defense\)

(2) To prepare various school education, governmental on-the-job training and social education instructors for the All-Out Defense Education Act, the MND and the Ministry of Education have, between October and December 2005, held 8 series of the "2005 All-out Defense Education Instruc-



- (3) In order to implement multi-dimensional teaching and practical experience in all levels of military education, the MND has, since 2006, combined the "National Defense Professional and Military Features" to hold 12 types of "Military Summer Camps" in the north, central and south regions of Taiwan and offshore Penghu area. The camps emphasize learning through having fun and the types of camps include "Boot Camp," "Airborne Training," "Missile and Artillery," "Mechanized Infantry Combat Training," "Special Operation," "Amphibious Reconnaissance," "Jungle Life," "Sea Navigation," "Aviation and Air Defense," "Mobilization," and "Secret Services." They are mainly for students of senior or vocational high schools and above and 3,400 people will be recruited annually. It is hoped that these practical training, experience and settings may guide the youth in their recognition of the importance of defense to national security, strengthen their understanding of defense affairs, build an all-out defense consensus and encourage the people's awareness in national defense.
- (4) To fulfill the All-Out Defense Education Act and make the public sufficiently understand the defense establishment, from October 2005, the MND has been choosing bases from the north, central, south, east, or offshore islands to carry out the "Journey of Discovery" trips every Saturday and Sunday. Each base will display its equipment and hold air shows, exercises and family activities according to the characteristics of each base. For example, in the 2005 Double Tenth Day holiday (from October 8 to 10), the MND opened 25 bases in the Taiwan and Penghu area (13 Army, 4 Navy, 3 Air Force, 3 Reserves, 1 Combined Logistics and 1 Military Police bases), including combat power exhibits in the Army's Huko base, Navy's Tsoying base and Chiayi Air Force Base. Within the 3-day vacation, 68,231 visitors were accommodated.
- (5) Given limited space, in order to preserve military artifacts, the MND will actively refurbish the appearance and improve the exhibit themes of important military artifacts in the Armed Forces Museum. Currently, the museum attracts approximately 50,000 visitors each year and is an important site for promoting all-out defense education. Other than the Armed Forces Museum and unit history museums, the MND is also actively helping local governments display retired military

n All-out support for ana. articipation in Defense equipment. As of October 2005, there are 37 display sites across Taiwan, displaying 206 items. The regional military history parks in Chi-chi town of Nanto county and Madou town of Tainan county are the largest of such display sites. Displaying retired equipment is not only an important part of all-out defense education, it has also become a tourism asset for the local government, which is very helpful for promoting local prosperity.

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#### **II. Recruiting Elite Candidates**



A modernized military depends heavily on high-quality personnel. A modernized defense also relies on high-quality personnel to effectively increase combat capabilities. Currently, the armed forces are striving toward the goal of being high-quality, streamlined and powerful. As the new-generation forces are transformed, besides relying on cutting-edge weapons for such enormous defense responsibility, those operating the weapons are the key to actualize combat power and secure victory. Because the armed forces need more professional personnel to perform various missions, the MND has planned a comprehensive recruitment and employment system for officers, non-commissioned officers and professional enlists to attract competent civilian citizens into professional defense. They are summarized below:

#### 1. Military Academy Undergraduate Program

#### (1) Recruiting Classes

These include the Chinese Military Academy, Naval Academy, Air Force Academy, Fu Hsing Kang College, National Defense Management College, Chung Cheng Institute of Technology, and the National Defense Medical Center, which recruit students with senior or vocational high school level learning.

#### (2) Admission

There are two methods of admission: School recommendations (current graduates of domestic senior high schools) and personal applications (current graduates or graduates of domestic high school or vocational high school or above, or students deemed to have enough learning to qualify for university exams).

#### (3) Enrollment

- a. From 2006, all joint military academy entrance exams were ended and have been replaced by selection methods.
  - b. Selected admission will be based on schools recommendation or personal applications:









 $\triangle$  Attracting outstanding civilians to join the Defense profession

(a)School recommendation

Current domestic senior high school graduates qualified for university major programs and recommended by their attending schools can register with the Military Academy Undergraduate Program Recruitment Committee, and participate in the 2006 College Entrance Examination Center's Academic Proficiency Exam (hereinafter referred to as Academic Proficiency Exam). After passing the stage-1 Academic Proficiency Exam and stage-2 military academy selection, they may be enrolled. Every student recommended by the respective participating school can be recommended to one department.

#### (b)Personal applications

Graduates or currently graduating students from domestic or foreign senior high schools, vocational high schools, or higher, who qualify for university major programs, or those who have been deemed to have fulfilled the Article 2 requirements of the "university-equivalent learning capacity standards," and have participated in the Academic Proficiency Exam, have to report to the Military Academy Undergraduate Program Recruitment Committee. After passing the stage-1 Academic Proficiency Exam and stage-2 school-specific evaluations, they may be enrolled. Every participating student may apply

to a maximum of 5 departments, or 2 departments in the same school.

#### (4) Application Method

Registrations are accepted online only and the required application materials must be mailed to the Recruitment Center. (URL of the Armed Forces Recruitment Center: http://rdrc.mnd.gov.tw/)

#### 2. Volunteer Professional Preparatory Military Officer Class

#### (1) Recruitment Overview

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apper 1

In coordination with the Jingjin Program's streamlining of the number of officers, mediumterm volunteer military officer classes handled by the military services (selection, transfer, naval professionals, and other professional classes, etc.) have been simplified, and universal "Volunteer Professional Preparatory Military Officer Class" have begun since 2005. They provide one year or less basic education for reserve officers. Those who have successfully completed the course will be commissioned as second lieutenants and have to serve for 5 years.

#### (2) Recruitment Targets

Youths who have bachelor degrees or above but have not been drafted are welcome.

#### (3) Examination Method

The MND will refine the examination and selection process by adopting "one result (fitness test) for multiple applications" and enlist examinees who have passed the concurrent reserve officer examination, oral exams and physical fitness tests, and have university bachelor degrees or higher. Youths who have not been drafted will undergo written exams, intelligence tests, oral exams and physical fitness tests.

#### 3. Professional Enlists Program

#### (1) Recruitment Overview

The Armed Forces' recruitment efforts of "professional enlists" since 2005 have met positive public reaction. Approximately 6,644 people were recruited, which is 101.27% of the annual target. Nearly 20% are individuals with bachelor degrees or above, which indicates drastic improvements in the quality of professional enlists. When young students graduating from school face career and draft choices, joining the professional enlists will not only help in planning personal careers and life development and increase personal knowledge and skills, it also offers many benefits. As society values certification more and more, discharged professional enlists will be more competitive than people of the same age. The armed forces' recruitment of "professional enlists" is not only a positive choice for society's youth, it also creates win-win scenarios between society and military, leading the armed forces into an era of high-quality and high-combat capability forces.

#### (2) Ways of Recruitment

These are categorized into three channels: "civil youths," "draftees under training," and "active regular enlisted." Annual recruitment targets are based on the characteristics and requirements of different military services. Public Announcements will be made through various military recruitment channels as appropriate.

#### (3) Ways of Application

Civil youth are universally required to fill and mail out online forms. Active regular enlisted will be handled by appropriate unit commanders or personnel officers. Draftees under training will



be handled by appropriate unit commanders or personnel officers in their respective batch of conscription.

#### 4. Defense Civilian Officials

The Organization Act of the Ministry of National Defense requires that one-third of the MND staff be civilian officials, which are usually civil servants from other agencies transferred to the MND by open selection. We have also applied for a "Civil Servant Special Examination for MND Civilian Personnel Examination" from the Ministry of Examination, hoping to develop long-term civilian defense officials through restrictions on transferring civil servants using specialized tests (at least 6 years). We will also incorporate defense-related test subjects to select personnel with defenserelated talents to participate in defense affairs so as to nurture civilian defense officials for the future decision-making hierarchy.

The "Civil Servant Special Examination for MND Civilian Personnel Examination" was held from May 6 to June 7, 2006, with class-1 tests (4 positions; qualified persons will be employed in level 9 positions) and class-2 tests (29 positions; qualified persons will be employed in level 7 positions). Test contents included general subjects, defense laws and national security policies to address future requirements. Qualified persons will receive on-the-job training in accordance with the Civil Servant Training and Advanced Education Act. The MND will implement additional military and civilian staff training plans which are separated into basic, specialized and joint staff training. This will improve professional defense qualities and military-civilian cooperation.

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#### **III. Reasonable Defense Budgeting**



Participation in Defense

Defense establishments are important foundations of the national development. Appropriate defense investment can be the strongest protection for a solid national security, political democracy and economic prosperity. The amount of defense investment is decided by overall government policy objectives and the degree of threats the nation faces. On the one hand, the government needs to insist on political and economic developments for the good of the people and simultaneously consolidate defense potential. On the other hand, the government needs to observe developments in cross-strait relations and trends of external military threats and invest adequately in defense establishments to secure political and economic development results. The two need to be balanced by limits and opportunities of objective and subjective conditions.

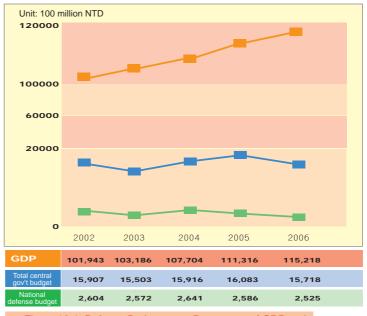
#### 1. The Ratio of Defense Budget to GDP and Total Central Government Budget

Since 2000, government policies have focused on economic objectives and establishments. Annual defense budgets have remained between 240 and 280 billion NTD. But with the total central

government budget greatly increasing after 1999 and a stable GDP growth, defense budgets are becoming smaller proportional to GDP and total government expenditures. (Refer to Figure 12-1, Defense Budgets as a Percentage of GDP and Government Expenditures in the Last 5 Years)

#### 2. The MND's Economizing Efforts on the Budget

The MND has cut down unnecessary expenditures and



 $\triangle$  Figure 12-1 Defense Budgets as a Percentage of GDP and Government Expenditures in the Last 5 Years

reassessed armament needs to do its best to maintain general military preparations. However, many of the MND's cost-saving efforts could not be numerically realized because of the government's increasing the overall budget without increasing the defense budget. For example, the MND has actively simplified personnel affairs to lower personnel costs. For ten years between 1997 and 2006, we have saved approximately NTD 40.5 billion. However, defense budgets have slightly decreased over the last decade. In addition, the implementation of several policies also amount to an additional NTD 60.8 billion in personnel maintenance cost, far more than the NTD 40.5 billion saved by the MND, causing personnel maintenance fees to increase in proportion to defense budgets (Refer to Figure 12-2, Comparison of Armed Forces Ppersonnel Maintenance costs Variations between 1997 and 2006). The aforesaid policies include the MND's 5-time cooperation to adjust wages for military and civil servants (1997, 1998, 1999, 2001, and 2005), implementing new retirement standards (1997), increasing retirement fund liquidity (2004 and 2006), joining the National Health Care Insurance Program (Since 2001), issuing volunteer service wages (2000), and recruiting professional enlists (2003 and 2005).

Nevertheless, the MND still tries to maintain adequate military investments to keep up with military development schedules. Since 2000, we were barely able to complete major military purchase budgets for the Kidd destroyers (2002), the Po-Sheng Program (2003), and long-range surveil-



△ Figure 12-2 Comparison of Armed Forces Personnel Maintenance Fees Variations between 1997 and 2006

lance radar (2004). However, facing the PRC's continuous two-digit percentile growth in defense budgets, introductions of precision weapons and increased deployments against Taiwan, the military balance across the Taiwan Strait is beginning to disadvantage Taiwan. The scale of Taiwan's current military investment can maintain current contracting schedules, but is still insufficient for military development needs, never mind being minimally sufficient for militarily deterring the PRC's intent to invade Taiwan. Therefore, military investment needs to be expanded and accelerated.

Other than urgent equipment renewal needs to increase overall combat power, the MND plans to recruit 45,561 professional enlists between 2005 and 2008. The items required to be budgeted for include salaries, professional wages, volunteer wages, primary and secondary food allowances, military insurance subsidy, National Health Care Insurance Program, retirement funds, and mission or station-specific regional allowance (in the outer or offshore islands), naval duty allowance, special forces allowance, funeral assistance, and marriage assistance. According to current remuneration

standards and scheduled calculations, an additional personnel maintenance fees of NTD 26.4 billion will be required between 2006 and 2008.

To address increased need for military investment and personnel maintenance fees, and enhance self defense capabilities, the President has, after listening to the Executive Yuan's "2005 Total Central Government Budget" on August 4, 2005, indicated that defense budgets should be annually increased to 3% of GDP within 3 years if possible.

To allocate 3% of annual GDP, defense budget will be around 350 billion NTD per year (base on 2006 GDP 11.5218 trillion NTD). The MND hopes that the public understands the hardships of the times and supports appropriate increases in defense spending. We will also continue all cost-saving measures and sincerely assess military development needs to lower overall government financial burdens, and use ICPs and defense privatization so that increases in defense spending also yield economic benefits, creating military-civilian win-win situations.

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#### IV. Implementing All-out Defense Mobilization Systems



All-out defense mobilization is the strategically defensive national mobilization of political, economic, military, psychological and technological powers through military strategic frameworks and guidance. The Executive Yuan follows the stipulation of the "Act of All-Out Defense Mobilization Preparation" to set up the "Conference for All-out Defense Mobilization Preparation of the Executive Yuan." The MND's Department of Reserve Affairs serves concurrently as the conference secretary. It coordinates 8 ministerial conferences on matters regarding preparation work for morale, manpower, material & economy, finance, transportation, health, technology and military affairs. It also participates in 25 conferences of mobilization preparation held by special municipalities and county (city) governments. It is hoped that the all-out defense mobilization efforts may be realized cooperatively.

All-out defense mobilization takes both defense and civilian developments into account. In peacetime, mobilization follows the principle of "incorporating mobilization in policy implementation and assimilating combat readiness in the economic infrastructure." The central ministerial and local governments reinforce aspects of mobilization preparation such as morale, manpower, material & economy, finance, transportation, health, technology and military so as to strengthen preparedness for contingencies. All these are connected with emergency systems of disaster prevention and relief, contagious disease prevention and treatment, radiological disaster contingency, and anti-terrorist action. They serve as the main support for the "homeland security network," nurture the nation's over-



all defense potential and provide disaster relief assistance. During a crisis, the people will be appropriately mobilized as per peacetime planning and training to effectively support military operations, maintain emergency response functions in public institutions, and provide basic civilian needs.

#### 1. Directions for Enhancing All-Out Defense Mobilization

- (1) Propagate the idea of all-out defense and develop the people's consensus on national defense to achieve an all-out defense that is "all-dimensional," "participated in by the people," "integrated," and "trusted by the people."
- (2) Deal with the possibility of "compound crises" and carry out all-out defense mobilization systems to connect all response mechanisms so as to facilitate the functions of related supporting mechanisms for disaster contingencies.
- (3) Lay down the guiding principle of "incorporating mobilization in policy implementation and assimilating combat readiness in economic infrastructure," carry out the policy of "integrating national defense with the people's livelihood," and preserve the dynamics of comprehensive mobilization so as to reinforce war preparedness.
- (4) Upgrade the function of the "Coordination Organization of All-out Defense Combat Capabilities" as an interface and coordinate with mobilization conferences of local governments so as to transform the people's power into combat power."
- (5) Enhance contingency management response capabilities for multi-dimensional disasters, establish operating procedures for coordination and meet the requirements for defense so as to put various contingency management mechanisms into assessment in annual "Wan-an Exercises," by which all-out defense capability can be strengthened.
- (6) Focus on being "skillful in mobilization, swift in troop formation, and fast in replenishment of combat strength" and thereby improve reserve units' personnel, equipment and training readiness and integration so as to effect the capabilities of timely mobilization and combat.

#### 2. Concrete Improvements in All-Out Defense Mobilization

# (1) Enhance the Education and the Integration and Coordination of All-Out Defense Mobilization Mechanisms

In order to effectively integrate "administrative mobilization" and "military mobilization" mechanisms, the MND held "Executive Seminars of All-out Defense Mobilization Preparation" in 2004 and 2005 respectively. Trainees were executives of mobilization preparation from central governmental agencies, headquarters and commands of all services, operational areas and county (city) governments. Lectures, military specialty courses and wargaming were given during the seminar. Through this centralized education measure, it is hoped that the functions, related laws

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and operational functions of mobilization preparation conferences can be enhanced; the knowledge of all-level leaders can be increased; the coordination effectiveness can be improved; and the all-out defense readiness can be realized. Other than the executive seminars, the MND will also hold seminar tours for base-level mobilization cadre in the north (including Matzu), central, south (including Kinmen), Hualien and Taitung, and Penghu in order to enforce understanding of mobilization laws and measures for all levels of mobilization cadre, and to familiarize them with relevant operational procedures. These seminars are directed at mobilization preparation personnel from central governmental agencies, and secretarial units, executives and staffs (including registered public and private-sector agencies) for county (city) government mobilization conferences and the Coordination Conference of All-out Defense Combat Capabilities. These two types of seminars are greatly beneficial for establishing coordination among various mobilization mechanisms and improving mobilization personnel's competence. The MND is currently reviewing the "Act of All-out Defense Mobilization Preparation" and relevant sub-regulations to enhance all levels of conference functions and ac-







△ The registration, formation and implementation of all-out defense mobilization

tualize all-out defense mobilization functions. It will also run the mobilization, disaster prevention and rescue, and combat capabilities coordination conferences together so that the nation's limited resources may come to full play.

#### (2) Improving Verification and Exercises

Recently, in order to verify the appropriateness of annual mobilization preparation plans to raise emergency mobilization and response capacities, the MND would annually incorporate them into the Hanguang Exercises, and invite other central governmental agencies and county (city) governments, and important public agencies to perform wargame or live exercises. For example, in 2002, there were 10 test exercises on mobilization of oil, electricity, tap water and reservoirs, which effectively increased emergency response capabilities. In 2003, we performed at-sea refueling exercises with rented oil tankers to fulfill combat support requirements. In 2004, to verify the efficiency of administrative mobilization in supporting various reserve troop mobilizations, the MND incorporated the stage-3 exercises of the Hanguang No. 20 Exercise and performed preparation training on the Jialuhtarng coast of Fangliao Township in Pingtung County, Chaojhou Town, and Laiyi Township after carrying out the policy of the "separetion of active and reserve forces." To raise the public's sense of urgency, and implement all-out defense concepts, overall military-civilian capabilities also used to implement general urban defenses in Chaojhou Town. Besides, the MND have finished the national material mobilization information registry system to quickly and accurately control civilian material mobilization capabilities, and enable peacetime support for disaster prevention and relief, and wartime support for military combat.

Simultaneously, to address non-contact, nonlinear, and asymmetric warfare developments, and natural and man-made disasters in peacetime, the annual all-out defense mobilization (Wan-an) exercise has exceeded its traditional anti-air exercise to focus on homeland defense. The exercises focus on special municipalities, county (city) governments' mobilization mechanisms, civil defense, emergency medicine, anti-terrorist attacks, disaster prevention and rescue, nuclear incidents and other contingency mechanisms. Through these coordinated training exercises, it is hoped we can enhance coordinated response capabilities with "mechanisms integration", "military-civilian oneness," and "government-military compatibility" so as to consolidate the "homeland security network" and actualize all-out defense. In 2005, the annual all-out defense mobilization exercises (Wan-an No. 28) focused on homeland defense and anti-terror support exercises. During the exercise, some 29,000 military, police, firefighting, civil defense, medical, and public and private industrial personnel, 3,000 vehicles of various types and industrial machinery, 24 helicopters, 21 boats, and 30 vehicles with detoxification equipment were mobilized, sufficiently indicating the strength of all-out defense mobilization. In the future, we may incorporate flood prevention training to actualize the overall establishment of the homeland security network.

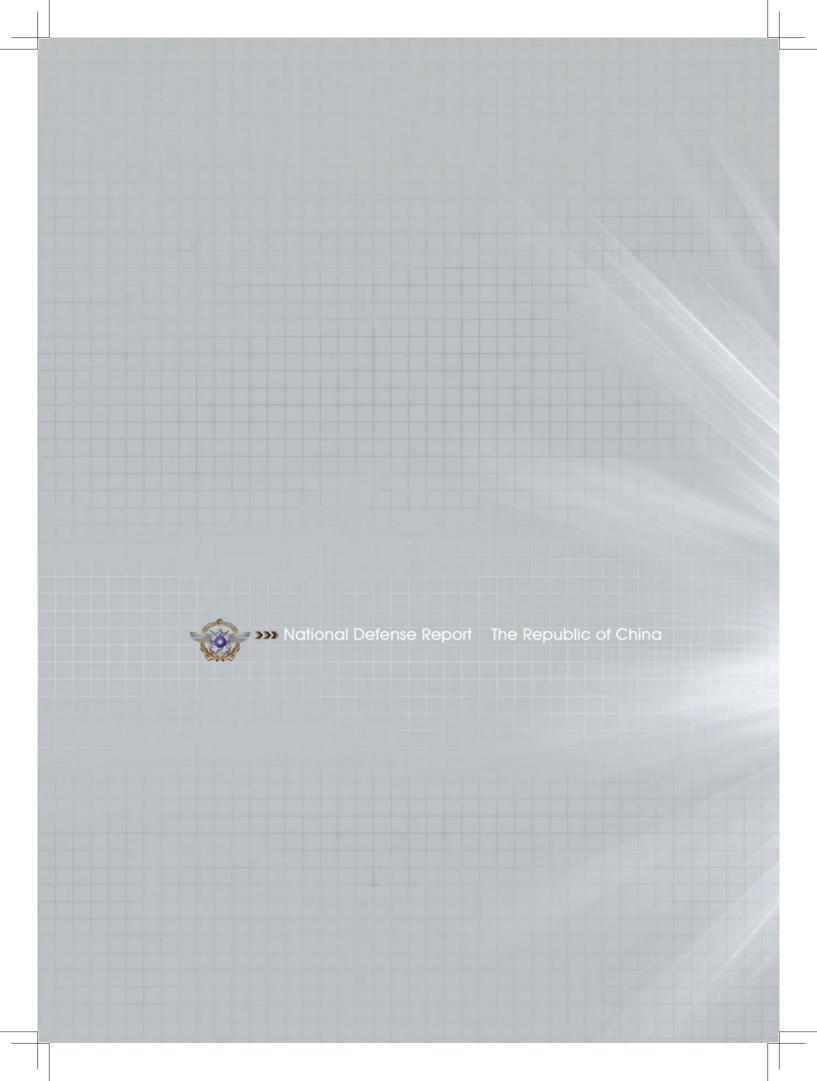
#### (3) Integrating and Improving Civil Defense Systems

To address changes through time, Taiwan's civil defense has changed from passive civil air defense to active civil defense, air raid protection and supporting military duties during wartime.

Matters related to military affairs will be the directed by the central competent authority (Ministry of

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the Interior) and the MND. In wartime, the MND will coordinate with the Ministry of the Interior to use civil defense organizations to support military duties. Therefore, civil defense can be defined as an internal defense that is closely connected to defense affairs. Civil defense covers sending air alert notice, broadcaseting alarms and air raid evacuations and disaster protection. It also assists with major disaster rescue, social order maintenance, military duty reinforcements, and the regimentation, training, exercising and logistics support of motor, boat, and aviation equipment. As it is closely related to the jurisdiction and contents of all-out defense mobilization, it has been incorporated as a preparation item in all-out defense personnel mobilization.

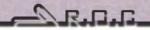




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## Joint Military Exercises and Military Observations between the PLA and Foreign Militaries from 2004 to 2005

Date	Exercise Name	Location	Participating Countries	Notes
March 16,2004	Sino-French military exercise	Qingdao's outer seas	China, France	The largest and most content- rich naval exercise between China and foreign navies
June 20,2004	Sino-British naval search and rescue exercise	Yellow Sea, near Qingdao	China, Britain	The first Sino-British exercise, and observed by naval officers from 15 countries, including the U.S., France, and Germany
August 6,2004	"Friendship - 2004" Sino- Pakistani anti- terror exercise	Pamir Plateau, Xinjiang (Sino-Pakistani border)	China, Pakistan	First Sino-Pakistani anti-terror military exercise
September 2, 2004	"Jiaolong - 2004" PLAN amphibious landing operation for naval marine corps	Shanwei, Guangdong	China	With 50 observers, including French and German military observers and domestic and for- eign National Defense University students
September 25, 2004	"Tiehquen - 2004" mountain assault exercise for mechanized infantry divisions	Queishan, Henan	China	Observed by military leaders and observers from 16 countries and military attaché from 13 countries
October 2004	Sino-Australian joint maritime search and rescue exercise	Yellow Sea	China, Australia	Joint maritime search and rescue exercise
August 18 to 25, 2005	Sino-Russian "Peace - 2005" military exercise	Vladivostok, Russia, and Shandong Peninsula, China	China, Russia	Observed by defense chiefs from SCO member countries and SCO military observers
September 6 to 27, 2005	"Beijian 2005" land- and-air joint operation exercise	Zhu Rih He, Inner Mongolia	China	With 40 invited observers, including American and Russian military attaché stationed in China
November 21 to 24, 2005	"Sino-Pakistani Friendship 2005" joint maritime search and exercise	Karachi port, Pakistan	China, Pakistan	Joint maritime search and rescue exercise
November 28 to December 1, 2005	"Sino-Indian Friend- ship 2005" joint mari- time search and resc- ue exercise	Kochi military port, India	China, India	Joint maritime search and rescue exercise
December 9 to 13, 2005	"Sino-Thai Friendship 2005" joint maritime search and rescue exercise	southern seas of the Se Tao Yi port, Thailand	China, Thailand	Joint maritime search and rescue exercise



### **Legislation and Amendments of the Two Defense Acts**

### 1. Legislative Background

Article 137 of the Constitution of the Republic of China states that: "The national defense of the Republic of China shall have as its objective the safeguarding of national security and the preservation of world peace. The organization of national defense shall be prescribed by law." Therefore, it has been an important agenda of the MND since 1950 to formulate a defense organization act that can establish a legalized, democratized, modernized, and professionalized defense system which can then promote all-out defense efforts and integrate overall national power. It has also been a legal project regarded highly by all generations of the Legislative Yuan legislators.

Because of the people's full support and dedicated guidance from the Legislative Yuan legislators, this major defense legislation has finally been completed after nearly 50 years of endeavor and renamed as the "National Defense Act." The Organization Act of the Ministry of National Defense was also amended in accordance with the legislative principle of the National Defense Act and the considerations of the defense organization modernization.

2. Legislative Process of the National Defense Act and the Amended Organization Act of the Ministry of National Defense

The MND has been investigating defense organization issues since 1950. In 1952 and 1954, the MND completed and revised the draft of the National Defense Organization Act and submitted it (by way of Executive Yuan letters) for review in the Legislative Yuan. The draft had been put on hold because there was no consensus on whether the power of the Commander-in-Chief of the Armed Forces should be independent and because of the problem of overlapping authorities between the Defense Conference and the Executive Yuan, etc. In 1970 the Organization Act of the Ministry of National Defense was carried into effect. The MND, having observed many objective changes in the last decade and that the formerly submitted draft of the National Defense Organization Act was no longer appropriate, requested that the Executive Yuan repeal the act in 1971 with permission from the Legislative Yuan. In the meantime, both the Executive Yuan and MND agreed that some defense organization acts, such as the rights and organizational regulations of general headquarters outlined in the amended Organization Act of the Ministry of National Defense in July 1978, and the Organization Act of the General Staff of the Ministry of National Defense on July 17, 1978, etc., still applied to all of the armed forces. This was deemed to temporarily sufficient the primary functions of standing defense institution, so the National Defense Organization Act was not amended and re-submitted to the Legislative Yuan.

On June 1, 1990, Mr. Chen Lu-an became the Defense Minister, and instructed on June 7 that modification of the legislation of the National Defense Organization Act should be resumed. On June 1992, the preliminary draft of the National Defense Organization Act was completed, but it was not submitted to the Executive Yuan



because it was considered only an internal staff study. At the end of the same month, former Premier Hao considered that the drafting of the National Defense Organization Act should be managed by the Executive Yuan because of its potential impacts on high levels of the command hierarchy. Therefore, all drafting work for the National Defense Organization Act were transferred to the Executive Yuan.

In March 1993, former Defense Minister Sun Chen resumed all drafting work for the National Defense Organization Act with relevant agencies as per Executive Yuan's instructions. Other than relevant MND and General Staff personnel, both the Secretariats of the National Security Council and the Executive Yuan, and the Ministries of the Interior, Justice, and Economic Affairs were also incorporated to form a steering committee and a drafting committee for the drafting. The process took 8 months and dozens of large and small conferences were held, with 13 of them officially recorded. 3 drafts (A, B, C) of the National Defense Organization Act were completed and submitted to the Executive Yuan for deliberation. In March 1994, the Executive Yuan replied that the submitted National Defense Organization Act draft should be resubmitted after appropriate revisions based on Constitutional changes and trends.

In July 1997, the National Assembly completed provisional Constitutional Amendments, and the Amendment statues were signed by the President on the 21st of the same month. The MND thus initiated research and completed drafts A and B (A: maintain status quo; B: adopt new approach) of the National Defense Organization Act under the direction of former Defense Minister Chiang Chung-ling and in observance of the Constitutional changes. The drafts were submitted to the Executive Yuan for deliberation on September 1 of the same year. The Executive Yuan invited pertinent departments to 3 reviewing boards. Because both drafts had their rationale, no consensus was reached. On December 31, 1997, the Executive Yuan replied to the MND that the National Defense Organization Act should expand its applicability and be renamed the National Defense Act, and that the Organization Act of the Ministry of National Defense should be amended and submitted to the Executive Yuan. Military command and policy should be unified within the ministerial hierarchy, and the Chief of the General Staff should focus on military preparations and troop training to clarify the authorities and responsibilities in the National Defense Act. On April 30, 1998, the MND weighed opinions from all sides, as per Executive Yuan requests, and reported the drafted National Defense Act and the amended Organization Act of the Ministry of National Defense to the Executive Yuan. The Executive Yuan invited relevant departments to 4 review conferences, and on May 20 of the same year, submitted the two drafts to the Legislative Yuan for review. Regrettably, during the term of the 3<sup>rd</sup> Legislative Yuan, the regulation never reached the actual review stage. The defense committee of the Legislative Yuan had only convened a "Public Hearing for the National Defense Act" on October 14, 1998; and held a "Report Conference on the Draft for the National Defense Act" on the 19th of the same month.

Because the Executive Yuan's draft of the National Defense Act and the amended draft of the Organization Act of the Ministry of National Defense to the Legislative Yuan had not been reviewed by the committee of the 3<sup>rd</sup> Legislative Yuan, the 4<sup>th</sup> Legislative Yuan could not continue deliberation, as per the Legislative Yuan Functioning Act. On February 4, 1999, the Executive Yuan suggested that the drafts should be re-submitted. Former Defense Minister Tang Fei instructed his colleagues to weigh various opinions on the previous drafts, and on June 24, 1999, they were submitted to the Executive Yuan again after editing certain contents in the draft of the National Defense Act and the amended draft of the Organization Act of the Ministry of National Defense with

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an aim for corresponding jurisdictions, hierarchical responsibilities, and focus on mechanism functions. They were passed by the Executive Yuan at the 2643<sup>rd</sup> Yuan conference, and submitted to the Legislative Yuan on August 31, 1999. The Legislative Yuan began evaluation of the two drafts in November, 1999, during which the defense and legal committees held 6 joint conferences to evaluate the Executive Yuan draft of the National Defense Act by legislators Tsai Ming-Hsien, Lin Cho-shui, Chou Cheng-chih, Ting Shou-chung, Chu Fong-chi, Hau Lung-bin, and Huang Erh-hsuan, and the draft of the Organization Act of the Ministry of National Defense submitted by legislator Tsai Tung-rong. The legal and defense committees held 2 joint committees to review 2 versions of the amended draft of the Organization Act of the Ministry of National Defense: one forwarded by the Executive Yuan, and the other by legislators Chu Fong-chi, Lee Ching-hsiung, and Lin Cho-shui. Thanks to media and public support, the draft of the National Defense Act and the amended draft of the Organization Act of the Ministry of National Defense were finally completed in 3 readings in the Legislative Yuan on January 15, 2000, and promulgated as Hua-Tsung-(1)-Yi-Tzu No. 8900026960 and No. 8900026970.

- 3. Legislative Principles of the National Defense Act and the Amended Organization Act of the Ministry of National Defense
- (1)To establish a defense institution tailor-made to meet our national needs, the MND focused on the following 5 principles during the early drafting stages of the National Defense Act:
  - a. Consistency with Constitutional Institution

The legislation of the National Defense Act affects the foundation of our defense institution, which is also part of the central government institution. This naturally requires careful planning based on the presidential, Executive Yuan, and various departmental jurisdictions outlined by the Constitution and its Amendments.

b. Observance of World Trends

Defense institutions in modern democracies have existed for many years. Their operations deserve our reference. Therefore it is beneficial to compare the advantages and disadvantages among them, and tailor them to meet our national requirements.

c. Respect for Public Expectations

Democratic polity means governance by the people. Legislating the National Defense Act naturally needs to fulfill public expectations on unified military policy and command and civilian control of the military so as to fulfill the quest of democratic governance.

d. Consideration of Military Needs

Modern wars often take place in an instant and are difficult to predict precisely. Especially as there is insufficient strategic depth in the Taiwan, Penghu, Kinmen, and Matzu areas, warning times will be short. Appropriate military reactions need to be executed immediately to ensure national security. Therefore, accounting for military needs is naturally a necessary factor in legislating the National Defense Act.

e. Institutionalization of Defense Establishment

Legislating the National Defense Act is meant to integrate limited resources, sufficiently utilize overall national strength, and establish comprehensive and sustainable defense institutions to achieve standardization and support sustainable Constitutional development of the country.

(2) The Organization Act of the Ministry of National Defense was amended as follows in coordination with



considerations for unified military command and policy and modernization and professionalizing of defense organizations as outlined by the National Defense Act:

a. Realization of Civilian Control of the Military

The National Defense Act confirms civilian control of the military and unified military command and policy. To provide an environment for civilian ministers, the MND's staff agencies need to be improved to establish strategic and resource planning and military integration and assessment departments for the Minister. In this way, the Minister has long-term planning capabilities for defense policy and can supervise and evaluate the allocation and execution of defense budgets, direct and monitor military command, and armament development to facilitate defense administration.

### b. Professional Division of Labor

The National Defense Act confirms the 3-part defense organization of policy, command, and armament. MND agencies would undergo corresponding adjustments so that the policy branch handles strategic planning and resource acquisition and policy directions for command and armament branches. The command branch would handle combat operations, combat requirements recommendations, and military developments. The armament branch would establish armament development capacity and support the command branch's combat needs.

#### c. Coordination with Government Organization Reengineering

Government re-engineering is necessary because of the trend of the times and public expectations. To effectively increase administrative efficiency in defense, it is necessary to coordinate with the legislative intent of the Organic Standard Law of the Central Government Agencies of appropriate jurisdictions, clarify frameworks, streamline manpower, and make flexible adjustment. The MND and subordinate agencies should be adjusted to decrease defense hierarchy, establish flattened command systems, and increase military combat efficiency to build high-tech, professional, and all-out military forces.

### 4. Important Issues during the Legislative Yuan's Deliberation upon the Two Defense Acts

The 4th Legislative Yuan review of the National Defense Act drafts and the amended drafts of the Organization Act of the Ministry of National Defense include the versions submitted by the Executive Yuan and 9 other National Defense Act drafts proposed by legislators Tsai Ming-hsien, Lin Cho-shui, Chou Cheng-chih, Ting Shou-chung, Chu Fong-chi, Hau Lung-bin, Huang Erh-hsuan, and Tsai Tung-rong, and 4 other amended drafts of the Organization Act of the Ministry of National Defense, proposed by legislators Chu Fong-chi, Lee Ching-hsiung, and Lin Cho-shui. The review work was difficult. Fortunately, with multi-partisan coordination, a consensus was reached, and the acts were legislated. The major issues are summarized as follows:

### (1)Military Neutrality

There were no specific military administrative neutrality clauses in the Executive Yuan's drafts, except requiring compliance to other administrative neutrality laws (i.e. the administrative neutrality requirements of public servants outlined in the Public Officials Election and Recall Law, Civil Organizations Act, and the Political Neutrality Act). However, some of the legislator-proposed versions would prevent servicemen from participating in political activities, and political parties or organizations from exploiting the military, and also demanded non-partisan political education. After several multi-partisan negotiations with the MND, Paragraph

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2 of Article 6 of the National Defense Act was added so that servicemen cannot serve under political parties, organizations, or candidates for public office, force other servicemen into joining or assisting political parties or organizations or activities held by candidates for public offices, or engage in political party or policy promotion of other political activities in military agencies. Paragraph 3 stated that current servicemen who violate these stipulations will be disciplined by the MND.

### (2) Authority of the Commander-in-chief

The Executive Yuan's draft designated the President as the Commander-in-Chief of the national armed forces. Many of the legislator versions were the same. However, some legislators advocated that the President is to be a symbolic commander, while actual troop command would be exercised by the Executive Yuan Premier and the Defense Minister. Some also wanted the President to not hold command rights during peacetime (during which the Defense Minister would hold command rights), but be able to command the troops through the defense minister during wartime. After many explanations from the MND, the majority of legislators agreed that the President should hold troop command rights over the nation's armed forces.

#### (3) Military Command Procedures

- a. The Executive Yuan's draft stipulated, "The President has troop command rights through the Defense Minister, who would order the Chief of General Staff to execute presidential orders." Some legislator versions agreed with the Executive Yuan version, while other versions suggested that troop command has to be approved by the Executive Yuan Premier.
- b. The Executive Yuan's draft and most legislator drafts agreed that the Chief of the General Staff has troop command rights (some did, however, support using language such as "under the Minister's orders"). Some legislators opposed.
- c. After the MND explained many times to the legislators about hierarchical responsibilities, time-efficiency mechanisms, and the principles of civilian control of the military and unified military policy and command, the Executive Yuan's draft was partially edited so as to make the President command the troops through the Defense Minister, who would, in turn, order the Chief of the General Staff to carry out the commands.

### (4)Qualification Requirements for Defense Ministers

The Executive Yuan's draft clarified that the defense minister is a civilian job, without any restrictions on whether discharged soldiers can serve in the position. Some legislators suggested that soldiers who have not been discharged for a given length of time should not be eligible for the defense minister position. The MND explained to the legislators that, because of Taiwan's unique situation, it is inappropriate to require soldiers to be discharged for a minimum amount of time before becoming eligible for the defense minister position. Although the cause was agreeable, such restrictions were not placed in the finalized legislations. However, it was still decided that, after the Organization Act of the Ministry of National Defense went into effect, the Defense Minister should, as frequently as would be appropriate, come from a civilian background, to accentuate civilian control of the military.

### (5) Addition of an Extra Deputy Defense Minister

The Executive Yuan's draft and many of the legislators' drafts had no regulations on the number and jurisdictions of deputy defense ministers. Some legislators supported allowing 3 deputy ministers for policy, command, and armament. Some supported changing the title of "deputy minister" to "administrative deputy."



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After the MND explained the military and constitutional characteristics of the National Defense Act and the importance of its contents towards defense matters, there was no major controversy on deputy defense ministerial vacancies, and so there needed to be regulations only in the Organization Act for the Ministry of National Defense, and not the National Defense Act. The MND has many jurisdictions that may not be consistent with other departments, and the position of deputy ministers also have historical significance, and needed to remain. Most legislators agreed. It was then decided that 1 deputy defense ministerial position will be added in the Organization Act of the Ministry of National Defense, who will be a general or on Special Appointment Rank. Also, in order to minimize MND bureaucracy, administrative deputy minister positions have been lowered from 3 to 2.

(6)Organization and Functions of Service Headquarters

Many legislators believed that the military headquarters (commands) should handle military preparations without holding combat command rights, that joint operation should be handled by separate combat (zone) headquarters under the defense minister's directions, and that military headquarters (commands) should be gradually streamlined into doctrine-based commands. The Defense Minister repeatedly explained during the evaluation meeting that the emphases of restructuring was not about nominal adjustments of the agencies but rather the utilization of their future functionalities. After the military headquarters (commands) have been assigned under the MND, they should still retain their autonomy. Their missions could be simplified, but they needed to be structurally complete. The degree of restructuring should be based on need: give whatever was necessary, and cut down that which was not; this was not a one-size-fits-all restructuring. After multi-partisan negotiations with the MND, it was decided that the National Defense Act would not regulate the organization of military headquarters, and that Article 10 of the Organization Act of the Ministry of National Defense would empower the MND to establish army, navy and air force general headquarters (GHQ), and combined logistics, reserve and military police commands, whose organization would be determined by order. The MND could assign agencies and troops subordinate to the aforementioned military agencies under the command of the General Staff Headquarters. The general army, navy, and air force headquarters would be changed to the army, navy, and air force commands within 3 years. If necessary, a 1-year extension would be allowed.

- 5. Important Contents of the National Defense Act and the Amended Organization Act of the Ministry of National Defense
- (1) The National Defense Act comprises 7 chapters and is further detailed in 35 articles. Important contents are summarized as follows:
  - a. Confirming Overall Defense Concepts

National defense refers to security preparations taken to defend a nation's territory, sovereignty, and people; the contents of which include military and all-out defense, and political, economic, psychological, and technological affairs that may be directly or indirectly beneficial to accomplishing defense objectives. This cannot be accomplished by military force alone. Therefore, the National Defense Act outlines the all-out defense concept to integrate and apply overall national resources, establish defense capabilities, and achieve defense objectives. (Articles 2 & 3)

b. Defining the Scope of the Defense Forces

The defense military forces of the Republic of China are defined to include the Army, Navy and Air Force. In wartime, the MND can assign other legally established armed units to participate in the order of battle according to military needs, after receiving permission from the Executive Yuan. (Article 4)

c. Reassuring the Idea of a Nationalized Military

Article 138 of the Constitution stipulates that all of the ROC's Army, Navy, and Air Force soldiers should transcend their personal, regional, and political relations, and loyally serve the nation and its people. Therefore, the National Defense Act outlines concrete contents to assure a nationalized military, describing that the ROC's Armed Forces shall remain neutral from individual, regional and partisan affiliations in accordance with the Act. The National Defense Act also explicitly forbids active servicemen to be involved in political activities. (Article 6)

d. Specifying Defense Establishment and Jurisdiction

Based on the Constitution, its Amendments and relevant laws, we have set out, in Chapter 2, the defense establishment, authorities and responsibilities, clearly identifying the defense authorities and responsibilities of the President, the National Security Council, the Executive Yuan, and the MND, so that one can coordinate with the other and accomplish defense objectives. Major ideas in the statute are as follows:

(a) The President commands the Armed Forces

Article 36 of the Constitution empowers the President to command the national Army, Navy, and Air Force. Therefore, the highest level in the military chain of command is the President. At the ministry level, such defense commands are usually held by Defense Ministers in foreign advanced democracies. Direct military command next to the President, however, is better delegated to the Chief of the General Staff, the one with military professionalism. Therefore, the President delegates his power of being Commander-in-Chief of the Armed Forces to the Defense Minister, who then delegates that authority to the Chief of the General Staff, who then directly commands the Armed Forces. This design allows for more effective exercise of combat power and secures a better chance of victory. (Article 8)

(b) The National Security Council acts as the consulting agency for the President's defense policy decisions

Paragraph 4 of Article 2 of the Constitutional Amendment and Article 2 of the Organization Act of the National Security Council state that the National Security Council acts as a consulting agency for the President's national security-related policy guidelines, and that defense affairs should comprise an important part of national security affairs. It is thus specified that, to make national security-related defense policy guidelines or to respond to urgent defense situations, the President is empowered to convene national security conferences. (Article 9)

(c) The Executive Yuan formulates defense policies

Article 53 of the Constitution states that the Executive Yuan is the country's highest level executive organ. Paragraph 2 of Article 3 of the Constitutional Amendments states that the Executive Yuan takes responsibility to the Legislative Yuan. It is thus specified that the Executive Yuan is responsible for formulation of defense policies, consolidation of overall national power and supervision of its subordinate agencies to conduct relevant defense affairs. (Article 10)

(d) The MND is in charge of defense affairs across the country



The MND is the executive agency for defense-related affairs under the Executive Yuan. It is thus specified that the MND is in charge of defense-related affairs across the country. It should serve professional functions in military policy, command, and armament branches to make defense policy proposals based on national security needs, and formulate military strategy as guiding principles for military preparations. (Article 11)

- e. Jurisdictions of the Minister of National Defense and the Chief of the General Staff
- (a) The Minister of National Defense manages military policy and command

To unite military policy and command components, meet public expectations, and realize the democratic principle of civilian control of the military, it is specified that the Minister of National Defense is a civilian official position which supervises all defense affairs (i.e. military policy, command, and armaments), so that defense affairs are subject to public scrutiny. (Article 12)

(b) The Chief of the General Staff is in charge of military command affairs and commands troops under the order of the Minister of National Defense

Commanding troops is a professional military function that is worked within the military all over the countries in the world. Additionally, because the Taiwan, Penghu, Kinmen, and Matzu regions face strong military threats from the PRC, our defense operations are required to be joint. Furthermore, territory and defense resources in Taiwan, Penghu, Kinmen, and Matzu are limited, not as abundant as the ones possessed by the US military, which allows distinct separation between the Joint Chiefs of Staff (staff) from the other combatant commands (command). Taiwan needs to learn from most European countries, i.e. to combine staff and command components. The General Staff Headquarters will act concurrently as the joint operations command for simplification purposes. It is thus specified in Article 13 that "The MND has under it the General Staff Headquarters (GSH), serving as a staff organization of the military command system, and the command mechanism for joint operations for the Minister. The GSH is headed by the CGS, who is in charge of military command affairs, and is under the Minister's orders to command the ROC Armed Forces." This will utilize the functions of military professionalism and ensure a system of matching jurisdictions and level-based responsibilities. Also, Article 14 regulates troop command items, concretely clarifying the jurisdictions of the Chief of the General Staff.

f. Enumerating Activities Subject to Military Chain of Command

Article 14 of the National Defense Act enumerates all activities subject to military chain of command and clarifies its coverage. Regulations are as follows:

- (a) Personnel management and service duties
- (b) Gathering and analyzing of military intelligence
- (c) Planning and implementing the order of battle and operations plans
- (d) Deployment and training of the forces
- (e) Preparation and implementation to mobilize the forces
- (f) Formulation of military doctrine and research and development (R&D) of combat activities
- (g) Allocation and utilization of military personnel, equipment and supplies
- (h) Planning and implementing operations in communications, information and electronic warfare
- (i) Implementation of political warfare
- (j) Supervision over tactics and techniques

- (k) Other activities subject to the military chain of command
- g. Clarify the Rights and Obligations of Military Personnel

The rights and obligations of current servicemen in Taiwan have been defined by the Conscription Act, Act of Military Service for Officers and Noncommissioned Officers of the Armed Forces, Act of Commission for Officers and Noncommissioned Officers of the Armed Forces, Act of Assignment for Officers and Noncommissioned Officers of the Armed Forces, Act of Merit for Officers and Noncommissioned Officers of the Armed Forces, Act of Military Education, Act of Insurance for servicemen, and the Act of Compensation for servicemen. However, the National Defense Act is the foundational defense statute and the troops are the foundational defense power. To demonstrate respect for the position of current servicemen, we have specially specified the basic duties and rights of current servicemen in the text of Article 3 of the National Defense Act.

#### h. Ensure Preparedness of Defense Powers

Due to limited national resources, appropriate application dictates that registration and manpower acquisitions related to defense budgets should be geared towards defending national security. Civilian powers should also be combined to develop defense industries, achieve autonomous defense establishments, and integrate the results into civil society. At the same time, it is specified that, in order to meet national security needs, the Executive Yuan may approve emergency or classified defense infrastructures or facilities, and all levels of government should cooperate accordingly.

### i. Implement Mobilization and Civilian Defense According to Laws

In modern warfare, a nation cannot achieve victory without mobilizing its entire powers. Therefore, Article 24 states that, to meet defense needs, the President may issue constitutionally legal emergency orders and implement national or partial mobilization. The results of mobilization, however, depend on detailed peacetime preparations. It is thus specified that the Executive Yuan may designate relevant agencies to formulate required quantities of material in storage, draw up mobilization preparation plans, and conduct mobilization exercises to verify the feasibility thereof. Also, to realize all-out defense, safeguard the people and their properties, assist disaster relief and response during peacetime, and effectively support military duties during wartime, civil defense organizations may be established according to law to implement civil defense training in peacetime.

### j. Develop External Military Cooperation

The MND will establish military cooperation with friendly countries. Rights and duties of military troops or servicemen from friendly nations stationed in the ROC territory should be regulated by treaties or agreements so that they are subject to parliamentary supervision.

(2)In order to cooperate with unified military policy and command, civilian control of the military and utilization of professional division of labor, the following important amendments to the Organization Act of the Ministry of National Defense were made:

#### a. Clarify the Jurisdictions of the MND

The MND's jurisdictions were originally regulated by various internal agencies, as dictated by the Organization Act of the Ministry of National Defense. Contents were complex and tedious, and were deemed likely to cause organizational rigidity and lacking in flexibility and spirit. To enable the MND to coordinate with objective and subjective situational changes, flexible adjustments were made to the jurisdictions of internal agencies.



Laws related to these agencies stipulate only their jurisdictions and responsibilities and not the spirit of their jurisdictions. The MND's jurisdictions, as specified by Article 4 of the Organization Act of the Ministry of National Defense, are as follows:

- (a) Planning, recommendation, and implementation of defense policy;
- (b) Planning, rectification, and implementation of military strategy;
- (c) Planning and implementation of defense budgetary plans;
- (d) Establishment and development of military forces;
- (e) Research and development of defense technology and weapons systems;
- (f) Planning and implementation of armament production and construction of defense infrastructure;
- (g) Planning and implementation of defense manpower;
- (h) Rectification and implementation of commission, decommission, promotion and transfer of military personnel;
  - (i) Planning and implementation of defense resources;
  - (j) Management and implementation of defense codes and regulations;
  - (k) Planning and implementation of military justice related affairs;
  - (1) Planning and implementation of political warfare;
  - (m) Planning and implementation of reserve affairs;
  - (n) Integration and assessment of military buildup;
- (o) Planning and implementation of the editing and translation of the Armed Forces' history and administration:
  - (p) Planning, management and implementation of defense education;
  - (q) Planning, implementation and supervision of other defense related affairs.
- b. Change the General Staff Headquarters into the Minister's Military Command Staff and the Armed Forces Joint Operation Command Mechanism

Previously, the Chief of the General Staff served as the President's chief of staff in the command system. The President held command powers, which was delegated directly to the Chief of the General Staff to command the troops. In the administrative system, the Chief of the General Staff was only the chief of staff to the Minister of Defense. The National Defense Act has clarified defense institutions with unified military policy and command. The President controls troops command rights, which is now delegated to the Minister of Defense, and then to the Chief of the General Staff to execute such rights. The position and jurisdictions of the General Staff Headquarters, as dictated by the Organization Act of the Ministry of National Defense, were thus changed into the minister's military command staff and the armed forces joint operations command mechanism. The General Staff Headquarters now submit military requirements, recommend military defense resources allocations, supervise military readiness and training, sets out the order of battle, and formulates and executes operation plans and other relevant commanding affairs. Its organization is stipulated by law. (Article 6)

c. Change Service General Headquarters into Subordinates of the MND

To cooperate with unified military policy and command and organizational flattening, various military general headquarters originally under the General Staff Headquarters would be assigned under the MND, where the MND would establish Army, Navy and Air Force Command Headquarters, and combined logistics, reserve,

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and military police commands, and other military agencies, to allow more convenient ministerial direction and supervision, and reduce institutional hierarchy. To successfully exercise troop command, the MND may assign agencies and combat troops related to commanding forces in all military general headquarters to the command of the General Staff Headquarters for exercise of troop command and to ensure successful execution of missions. The Army, Navy, and Air Force General Headquarters shall be restructured to the Army, Navy, and Air Force Commands within 3 years. If necessary, a 1-year extension would be allowed. (Article 10)

#### d. New Ministerial Units in the MND

To ensure unified military policy and command and civilian control of the military, streamline personnel quota, and maximize functional utility, the MND has added the Department of Strategic Planning, Department of Resources (originally the Department of Materials), Department of Reserve Affairs, Integrated Assessment Office, Military History and Translation Office, and the Inspection Office to facilitate the Minister in managing all defense affairs.

e. The MND will Establish the Armaments Bureau and Other Agencies

It is specified that the MND will establish the Armaments Bureau, General Political Warfare Bureau, and the Comptroller Bureau, the organization of which will be stipulated by law. (Articles 7 to 9)

f. Amend MND Personnel Numbers and Job Positions

The Deputy Minister position has been increased from 1 to 2, held by either generals or Special Appointment Rank and Administrative Deputy Ministers positions have been reduced from 3 to 2. The legal personnel size of the Ministry has been reduced from 782 persons to 696 persons, with the condition that, 3 years after the passage of the Organization Act of the Ministry of National Defense, civilian positions have to occupy at least one-third of total personnel establishment. If necessary, a 1-year extension would be allowed. (Articles 13 to 15)

### g. Implementation Dates

Amending the Organization Act of the Ministry of National Defense involved major changes to the MND and subordinate agencies. In order to enable more convenience for the MND to adjust relevant agencies the implementation date of the amendment will be determined by the Executive Yuan within 3 years of announcing the amendment, in coordination with the National Defense Act (Article 23). As approved, by the Executive Yuan Tai-90 Fang Tzu No. 073408—letter No. 2 on December 24, 2001, the Two Defense Acts were to be enforced on March 1, 2002.



## Implementation Status and Results of the Military Complaint System

- 1. To respond to the Executive Yuan's single-window policy, the MND is focusing on convenient, focused, and single-service principles to raise the quality of the Armed Forces' work on complaints. On December 1, 2003, 12 "0800 complaint hotlines" (0800534780-5, 0800534880-5) were established to handle violations against the rights of servicemen and military dependents, and relevant administrative inquiries and affairs. The hotlines also universally manage, track, and process complaints to shorten the operational period, so as to properly manage each case with concrete results, ensure the rights of servicemen and military dependents, and encourage intra-troop harmony. Services of the MND's "0800 complaint hotlines" include:
  - (1) Violations of the rights of servicemen.
  - (2) Inappropriate discipline or wrongful accusation-related treatment of individual servicemen.
  - (3) Violations of benefits normally entitled to family members of servicemen.
- (4) Other inquiries related to personal services, operation exercises, logistical maintenance, medical problems, legal consultation, military material purchases, military dependent loans, psychological assistance, military (general) discipline, unit management, internal management, or reserves management.
- 2. The establishment of the Armed Forces' complaint system for servicemen is meant to establish communication channel and protect the legal rights of servicemen and military dependents, and contracted personnel. To enhance the management and investigation and processing mechanism of the complaint cases, each case will be managed and processed effectively according to the military complaint system. We have specially incorporated the Enforcement Regulations of Military Personnel Complaint Procedures as a special section in the Enforcement Regulations of Military Discipline Maintenance, clarifying the boundaries of complaints, jurisdictions, rights of appellants, duties, and time limits for the complaint process. We have also listed appellant protection clauses, which require appellants to remain anonymous. Violators may be severely disciplined, according to the situation in question.
- 3. Statistically, the MND's 0800 complaint hotlines have, from January 1, 2005, to July 15, 2006, received and completed 648 complaint cases and 29,709 service inquiries. Among these cases, 492 cases involved violations against regulations, 20 individuals were turned over to law enforcement, and 330 individuals were administratively disciplined. Implementation results are positive.
- 4. Because social fraud has been very prevalent in recent years, and methods thereof are increasingly creative, the MND, in order to protect servicemen and military dependents from being deceived, has changed the existing toll-free complaint phone number "08005374780" to an inquiry assistance hotline for military dependents

on May 1, 2005, and subsequently used Jyuguang Day televised education, Youth Daily News, Valor Monthly, and Soldiers' Diaries to promote the 0800534780 service hotline. It is also incorporated into the "104 Directory Assistance" for open inquiries, so that servicemen and military dependents can use them at their convenience.

- 5. From the founding of the 0800534780 service hotline to July 15, 2006, the MND has received 47 suspected fraud cases from the search assistance division for military dependents, which effectively protects servicemen and military dependents from being conned. Also, that hotline also received 342 general public cases, which, although not of MND jurisdiction, out of the MND's basic principles of service, were still transferred to the "165 anti-fraud inquiry assistance hotline" of the National Police Agency of the Ministry of the Interior.
- 6. Because the 12-line complaint hotline numbers are long and not easy to remember, the MND has planned to create hotlines with a single simplified number, after observing convenience measures taken by 8 current domestic government agencies and civilian agencies, such as: Lifeline (1995) and the Consumer Protection Commission (1950). The MND has requested approval for establishing 4-digit service hotlines from the Directorate of Telecommunications of the Ministry of Transportation and Communications.
- 7. The MND's 4-digit hotline number is designated to be 1985, which shares phonetic similarities with "you help me" in spoken Mandarin. The entire project was approved by the National Communications Council (NCC) on July 4, 2006, and would come into effect on August 1, 2006, making the MND the 9th agency in the country to use special 4-digit service codes. The hotline's services include:
  - (1) Violations against the legal rights of servicemen.
  - (2) Servicemen who are personally subjected to inappropriate discipline or wrongful accusation.
  - (3) Violations against benefits entitled to the dependents of servicemen.
  - (4) Sexual harassment complaint cases.
  - (5) Security-related reporting services.
  - (6) Anti-fraud (include search assistance) cases.
- (7) Inquiry services (we process inquiries related to military personnel affairs, combat exercises, logistical maintenance, medicals, law, military material purchases, military housing loans, psychological assistance, military (general) discipline, education, and reserve management).



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## Administrative Implementation Status and Results of the MND Military Personnel Rights Committee

- 1. To protect the legal rights of servicemen, the MND has officially initiated the MND Military Personnel Rights Committee on March 2002 to eliminate uncertainties among servicemen, solve their life and work problems, and harness loyalty. Our work in protecting the legal rights of servicemen is deeply trusted.
- 2. Scope of the Committee
  - (1) Cases of legal rights violation.
  - (2) Cases of inappropriate discipline or wrongful accusation.
  - (3) Cases of severe injuries and casualties.
  - (4) Disputes over sexual abuse allegations.
  - (5) Lawsuits caused while carrying out duty in service.
- (6) Other human rights abuse cases that may not be protected by current MND rules and regulations and that need inter-agency review or negotiations.
- 3. The Military Personnel Rights Committee system is divided into two tiers. The first tier includes the military personnel rights committees in the General Political Warfare Bureau, Army Command Headquarters, Navy Command Headquarters, Air Force Command Headquarters, Combined Logistics Command, Reserve Command, and the Military Police Command, which are responsible for deliberating military personnel rights related cases submitted by organic members. The second tier is the Military Personnel Rights Committee of the MND, which is responsible for coordinating and managing cases of personal rights violation and deliberating appeals against decisions from the first tier Military Personnel Rights Committees.

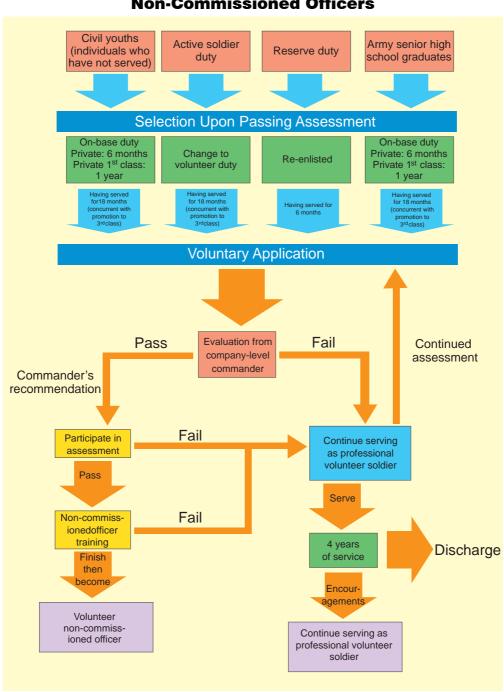
### 4. Implementation Results

- (1) Based on law, including the "Establishment and Processing Regulations for the Military Personnel Rights Committee," the "Processing Regulations for Legal Assistance for Servicemen Involving in Lawsuist on Duty," and the "Investigation Regulations for the Military Personnel Rights Committee," the Military Personnel Rights Committee provides legal service and assistance to military personnel involving lawsuits or their personal rights being violated during official duty. In 2005, the Military Personnel Rights Committees have completed 113 cases on personnel, training, logistics, medical care, legal consultation, mental counseling, dependents service, military discipline, and others, and effectively protect the individual rights of all servicemen.
- (2) The MND regularly (every season) summons counsellors inside and outside the department to deliberate on military personnel complaint cases. We may invite knowledgeable individuals from the public, academic experts, and agency representatives to assist with processing cases, investigations, and inquiries. In 2005, we have processed 36 deliberation and re-deliberation cases, making the protection of military personnel rights

more objective and impartial.

- (3) To increase the understanding of servicemen regarding the Military Personnel Rights Committee, counsellors have attended troop lectures and visits, and we have implemented knowledge contests with prizes, questionnaires, annual supervision evaluations, and distributed promotion cards, division summaries, notebooks, to increase promotion, supervise verification, and protect the rights of servicemen.
- (4) In filming the supplementary episode for military personnel who were sued for public misconduct, the Military Personnel Rights Committee has invited Chen Sung-yung, Tsai I-lin, and Hsieh Tsu-wu to star in the "Everyone is a Champion" show, with coordination from Jyuguang Day educational broadcasts. To increase promotion results, the show was made into DVDs and distributed to company-level troops for education. We hope to achieve education through recreational methods.

## Procedure of Promoting Competent Enlisted Personnel to Non-Commissioned Officers



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## Principles, Plans, and Campus Placements for Streamlining Military Academies in Northern Taiwan

- 1. Principles of streamlining the academies in northern Taiwan
- (1) Concentrate educational resources: We will perform on-site integration according to basic, intermediate, and advanced education class characteristics to maximize the benefits of educational resource integration.
- (2) Integrate competent instructors: We will use learning-based class designs to integrate multi-disciplinary instructors according to educational level to increase educational quality and research standards
- (3) Simplify education organization: In accordance with the schedule of the Jingjin Program, we will strive to simplify education organization through restructuring to increase the effectiveness of personnel usage.
- (4) Simplify Operational Procedures: Use modernized management to simplify various administrative education procedures to effectively support educational work and increase administrative efficiency.
- (5) Improve educational content: Through overall curricula planning, we will strive to improve and universalize the basic, intermediate, and advanced military education systems and their educational contents.

### 2. Streamlining Plans and Campus Placements

(1) Restructuring the National Defense University

The National Defense University will establish a War College, Army Staff College, Navy Staff College, Air Force Staff College, Institute of Technology, Management College, and Political Warfare College. The original Fu Hsing Kang College's political research classes and the Intelligence School's intelligence research classes will be integrated into various staff college curricula. Also, the National Defense Medical Center, originally under the National Defense University, will become an independent school.

- (2) Campus placements
- a. The headquarters of National Defense University, War College, Army Staff College, Navy Staff College, and Air Force Staff College will be placed in the Taoyuan Bade campus.
- b. The National Defense University Strategic Research Center, National Defense Management College, and the Political Warfare College will be placed in the Taipei Fu Hsing Kang campus.
  - c. The Chung Cheng Institute of Technology will be placed in the Dashi Yuan Shulin campus.
  - d. The National Defense Medical Center will be placed in the Taipei Neihu campus.



### **Civilian Job Categories in the MND**

	Composition						
Job categories	Selected	Selected and Recom- mended	Recom- mended	Recom- mended and Delegated	Delegated	Total	Agencies involved
General administration	57	2	53	5	39	156	Placed in all departments, offices, and bureaus other than the Personnel Office, Accounting Office, and the Military Personnel Rights Committee
Personnel administration	5		12		1	18	Department of Manpower, Personnel Office
Education and cultural administration	1		3			4	Department of Manpower
Woodwork engineering	1		3	1		5	Department of Resources
Industrial engineering	1		2	1		4	Department of Resources
Land properties			1	3		4	Department of Resources
Legal affairs	8		6			14	Department of Legal Affairs, Military Personnel Rights Committee
Legal administration	3		8			11	Department of Military Justice
Library and artifact management	2		3		2	7	Military History and Translation Office
News editing	2		3		1	6	Military History and Translation Office
Accounting	3		6	1	3	13	Accounting Office, Armaments Bureau, Medical Affairs Bureau
Statistics			1			1	Integrated Assessment Office
Business management			3	3		6	Armaments Bureau
Economic administration	1	1	3	1	2	8	Armaments Bureau
Mechanics				2		2	Armaments Bureau
Electronics				1		1	Armaments Bureau
Information management	1		2	2	1	6	Armaments Bureau, Medical Affairs Bureau
Medical	1			2		3	Medical Affairs Bureau
Environmental administration		1	3	4	3	11	Medical Affairs Bureau
Total	89	4	109	26	52	280	Not including the Minister, deputy Ministers, and other Special Appointment Ranks job positions
	1.Currently, there are 95 civilian job categories for public servants.						

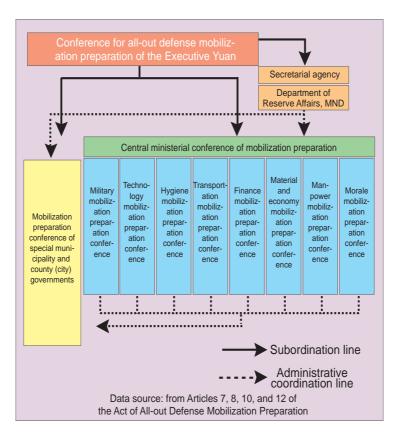
Notes

- 1. Currently, there are 95 civilian job categories for public servants.
- 2.The MND (including the Medical Affairs and Armaments Bureaus) have 280 civilian job vacancies (not including the Minister and deputy Ministers) under 19 job categories.
- 3.Category-wise, the "general" category has the most job vacancies, at 156. The fewest job vacancies are in Statistics and Electronics: 1 each.

### Administrative Conference System for All-out Defense Mobilization Preparation

All-out defense mobilization is a strategically defensive and openly national mobilization that incorporates military strategic frameworks and guidance that strive for effective deterrence and resolute defense so as to adequately utilize political, economic, military, psychological, and technological powers to consolidate national security. The Executive Yuan adheres to the regulations of the Act of All-out Defense Mobilization Preparation and established the "Conference for All-out Defense Mobilization Preparation of the Executive Yuan." The MND serves concurrently as the secretary of this conference. It coordinates 8 ministerial conferences on matters regarding morale, manpower, material & economy, transportation, finance, health, technology and military affairs. It also participates in 25 conferences of mobilization preparations with local governments of all echelons. It is hoped to promote the all-out defense mobilization efforts cooperatively. In addition, , the guidelines, projects, categorized plans, and execution plans for mobilization preparation are set up according to the various responsibilities so that each mobilization preparation item can be carried out in the order instructed.

The system is as follows:



# Case Studies of Industrial Results from Specialized Technological Projects Coordinated with the Ministry of Economic Affairs

Statistical research indicates that, from its participation in the technological plans in the Ministry of Economic Affairs from 2002 to 2005, the Chung-shan Institute of Science and Technology, under the MND's Armaments Bureau (henceforth abbreviated as the CSIST), has encouraged industrial investments of approximately 9 billion NTD, with production values of over 30 billion NTD. There are 40 commercialization projects for traditional industries, high-tech industries, and military goods. Classic case studies are summarized as follows:

- 1. Case Studies of Implementation Results from General Technological Plans
- (1) Ultra-wideband (UWB) plans to cultivate commercial potential for wireless communications industries Many market survey institutions expect that the global demand for UWB wireless electronic conveyance equipment and microchips will be more than 40 million units in 2007. The UWB industry can expect to succeed the wireless LAN as another star industry.

To address global industrial demands of possibly USD 1.39 billion in commercial value, the CSIST's electronics department takes over 20 years of experience in radar and communication system development, without relying on transfers of foreign technologies, and autonomously manufactures UWB system simulation platforms and RTL design codes, setting a foundation for domestic commercial wireless communication industries. In 2005, as the international MB-OFDM UWB regulations were being completed, this plan achieved major breakthroughs in the 2004 implementations. The design results were verified through testing to be completely compatible with the international MB-OFDM UWB regulation standards, meaning that we have technically grasped the core of the industrial standards. The research results of this UWB microchip system have received special attention from United Microelectronics Corporation, Genesys Logic, Sunplus Technology Co., VIA Networking Technologies Inc., Terasoft Inc., Winbond Electronics Corp, Taifa Corp, and Gentek Technology. Relevant technologies have been transferred to Advantech, Terasoft Inc., and Horng Yih Enterprise Corporation. Currently, we have acquired 6 domestic and external patents, and will apply for more patents in the future.

With this plan, a research partnership with relevant firms is established and jointly develops wireless USB communication IC-related products, which is expected to transfer to 2 or more domestic wireless communication IC design firms, which can shorten at least 6 months worth of research time, and encourage corporate investments of 300 million NTD or more, creating 3 billion NTD or more in production value for the UWB industry. It can also reduce domestic firms' reliance on technologies from large international firms, and create lucrative commercial opportunities for domestic UWB industries.

(2) Use corporate technological projects to create new domestic navigation electronics industries

The research team for the electronics department of CSIST has been working on implementing the aerospace information broadcasting and communication technology plans from FY 2004 to 2006, striving to focus on international orders. The efforts to incorporate international partner firms are gradually attaining expected benefits. Although external investments have been weakening for 2 straight years, and the domestic aerospace industry environment is less than desirable, we could still rely on abundant experienced personnel and domestic production capacity to attract external investment and on certification technologies to establish the only aerospace electronics research center in Taiwan. Other than assisting domestic industries in achieving aerospace electronics certification thresholds, the growth of the aerospace electronics research center also becomes a major advantage in attracting foreign aerospace electronics companies to make investments in Taiwan. Through authorizations of key patents, we are actively assisting the industry in striving for international orders and turning to domestic mass-production, which is an important stage for traditional industries desiring reform and creating high value-added electronics and information industries.

After 1 year of diligence in developing cargo aircraft communications, navigation guidance, and display control computers (AVIONIC 500 Airborne Computer), we have, under the witness of the Taiwan Aerospace Industry Association, officially contracted 1,000 units worth of first-quarter orders that need to be completed during 2006 to domestic firms, assisting the domestic navigation electronics industry in earning 140 million NTD. Before 2008, we expect to receive orders for 2,700 units with a production value that may reach 370 million NTD.

Also, to address market opportunities and changes, we are actively involved in research for flight safety and rescue system products (PLB/ELT/EPIRB, etc.), and adequately using domestic industrial capacities for manufactures of relevant GPS modules, antennas, frameworks, low-power and electricity sources. There have been 2,500 external orders on PLB products, which need to be completed by the end of 2006. The domestic industry is planning to begin mass production by the start of 2006. Production value is approximately 110 million NTD, which may exceed 240 million NTD before 2008.

(3) Strive to create an industry for automotive safety and electronic sensor and control systems

The global market demand is expected to experience compounded growth of 12% every year hereafter. By 2010, the global market production may be valued at over 100 billion NTD. If we can secure 10~15% of the greater China regional market, Taiwan's car and accessory industry scale can increase twofold over the present state, reaching a production value of 800 billion NTD. Automotive safety and electronic sensor and control systems and accessories play significant value-added roles. In time, domestic car manufacturers may focus on development and sales of cars and accessories. Taiwan may gradually become a transportation and development center while engaging in the manufacturing of different products around the world.

For many years, under the budgetary support of industrial plans of the Department of Industrial Technology in the Ministry of Economic Affairs, the CSIST's 4<sup>th</sup> Research Institute's executive team has integrated and reformed the application of rocket/missile fuel, explosives, electronic surveillance tracking/strike and launch control, and quality control projects. With cooperation from partner firms, system designs and technological and domestic industrial developments in automotive safety and electronic sensor and control systems have started from almost nothing in the beginning to the foundation we have today. The technological standard also went from trailing behind for at least 30 years to world-class competitiveness today. We also established au-

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tonomous core technologies and patent transfers for many automotive safety and electronic sensor and control system software and hardware, achieving domestic mass production and commercialization. Implemented items from planned industrial results include:

a. Establish and develop emerging industries for vehicle safety devices

We have assisted GSK Intek Co., Iron Force Industrial Co., Tongli Electronics, Ho Hong Jung Automation Co., Mei-An Autoliv Co., Universal Scientific Industrial Co., and Lonex Corp in entering the international first-class accessory supply chain. We can created 3 billion NTD in internal and external product sales, which is expected to increase to as much as 12 billion NTD in the next 3 years.

b. Assist the nationalized production of components / system manufacture

We have provided Yulon, Kuozui Motors, China Motor Corporation, Ford Lio Ho Motor Company, and Formosa Automobiles Sales Corp with newly marketed cars and comprehensive quality control and testing services. We can lower foreign exchange losses by at least 4 billion NTD every year.

- c. Successfully built professional and internationally reliable testing centers for automotive driver seat/front passenger seat/anti-side collision airbag systems, and received 3 national CNS certificates and an award from Sweden's Autoliv, the largest firm in the world, as the most advanced facility of its kind in the Asia-Pacific, which can provide the government with inspection tools for imported cars after Taiwan joins the WTO, and ensure the quality of internally or externally sold products.
- (4) Develop recorded media target material technologies to open new optical electronics material industries

"Target" refers to the metallic, non-metallic, or compounded materials used for sputter coating. As the optical electronics industry develops rapidly, it has become a unique key upper-level industry in Taiwan. In the past, raw coating (target) materials required by optical domestic electronics industries were mostly imported from Japan or the U.S., with an annual demand of over 15 billion NTD, which not only caused severe foreign exchange losses, but also reduced relevant domestic industrial development autonomy.

But, after the initiation of the CSIST's material and optical electronics research institute's 2-stage target material and production technology plan, we have fully focused on recorded media target material and production-related technologies, successfully demonstrating the following concrete industrial benefits:

a. Create production value

This technology has currently developed over 20 types of recorded media target material. Every year, there are over 6 partnership firms, including RITEK Corporation, China Steel Corporation, Nanya Technology Corporation, Solar Applied Materials Technology Corp, Fu Sheng Group, Prodisc Technology Inc., Homogeneity Co., and Gloria Material Technology Corp. Simultaneously, this attracts foreign target material companies to build factories in Taiwan. In 2004, domestic firms have produced recorded media-related target material worth 4 billion NTD or above, while offshoot optical electronic products are worth over 20 billion NTD.

b. Increase the competitiveness of the optical electronics industry

Before these technological developments, target materials were very expensive for related domestic industries, often with prices more than 50% of total costs, and there was no way to secure development information. For example, before these technological developments, 1 unit of silver-titanium (Ag-Ti) target material for CDs had to be imported externally at NTD 20,000 to 30,000. After we successfully assisted domestic firms to developments.

op the technologies, 1 unit of target material costs only NTD 5,000, which greatly lowers target material costs, directly benefiting the domestic optical electronics market, and increasing our international competitiveness in optical electronic products. Also, these technologies are beneficial for future product improvements and newly applied fields.

c. Raise the quality of the equipment manufacturing industry

Key production equipment for this project were all designed and made by CSIST and domestic firms, which is compatible with the objective of increasing domestic industrial manufacturing technology standards, and beneficial for subsequent improvements and characteristics enhancements. Therefore, domestic target material manufacturing currently uses mainly domestically produced equipment.

d. Encourage upgrading and transformation of traditional industries

In its earlier years, Solar Applied Materials Technology Corp focused on selling automotive chemicals and pure silver target material, while China Steel Corporation focused on steel and aluminum goods. Because CSIST successfully transferred the vacuum sensor-based welding and vacuum powder metallurgy technologies for recorded media target material production to Solar and China Steel, the two companies successfully reformed to focus on developing applied material technologies and producing high-level target materials. Solar also became an over-the-counter (OTC) company at the end of 2005.

e. Formation of local target material industries

The domestic recorded media and related fields spend over 10 billion NTD a year on raw coating material, almost all of which is imported. Because we have assisted domestic firms in successfully developing recorded media target material, foreign target material firms were forced to cut their prices in half, withdraw from the domestic market, or build factories in Taiwan. Other than many foreign firms building factories in Taiwan, currently, Solar Applied Materials Technology Corp, TTMC Corp, China Steel Corporation, Sintel Ltd., Lishan Corp, and Homogeneity Co. have all invested in production, breaking the American and Japanese oligopoly in the market of related photo-electric target materials, making target material manufacturing a new industry in Taiwan.

2. Case Studies of Implementation Results for Technological Projects for the Commercialization of Military Goods

The CSIST's technological projects for military goods commercialization have resulted in the commercialization of 32 items of military goods, 87 cooperation contracts, and 66 cooperation firms (including strategic research partnership contractors) between 2004 and 2005. Costs of subsidizing partner firms in the development of military goods are approximately 240 million NTD, which encouraged firms to invest 420 million NTD. Income derived from the application of research results from firms is almost 100 million NTD. Currently, much has been accomplished already. The developed military goods research and production chains are expected to significantly benefit the nationalization of Taiwan's armament industry and the establishment of autonomous defense technology industries. At the same time, the CSIST can assist firms to raise technologies from OEM levels to ODM levels through the implementation of programs, which is highly valuable for the industries. Below are explanations for four crowning examples:

(1) Manufacture of bulletproof ceramic armored vehicles:



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Hocheng Corporation, a materials and chemical processing company, participated in the military goods development project for high bullet-resistance ceramic material and accessories. They made high bullet-resistance material and accessory technology for bulletproof vests in the development of bullet-resistant ceramics. They also participated in Foreign Comparison Tests (FCT) plans in the U.S. and successfully passed preliminary selections in May 2005. In the future, they will become full-fledged contractors, becoming the only Taiwanese company that can provide bullet-resistant ceramic materials for the American military, which provides many commercial opportunities in the American military goods market. In its execution of the commercialization plan for military goods, the company has successfully established self-manufacturing capacities for military goods, and raised development personnel quality. In the future, when the armored vehicle upgrade plans officially enter production, it can generate an expected 300 million NTD in orders yearly. Also, technologies related to high bullet-resistance ceramics can be used for civilian bulletproof vests, bulletproof airplane cockpits, bulletproof limousines, etc., which is expected to generate at least 100 million NTD yearly. This no doubt opens the way for transforming and upgrading traditional industries.

(2) Application and development of composite material winding technology

Kingent Corp Ltd., which once belonged to the traditional material and chemical industries, has gone from manufacturing traditional tanks with low added value and technological level to high value-added manufacturing of special winding composite units, precision processing, and testing under the guidance of the CSIST's specialized military goods commercialization technological plans. The company has received orders exceeding 10 million NTD after successful guidance, and has applied for derivative patents.

This plan is expected to raise the autonomy and timeliness of relevant military weapon equipment deployments, reduce foreign armament procurements, and raise domestic market support for defense. It is estimated that, within 5 years, the company is expected to receive orders for composite material launching tubes worth 100 million NTD. After helping the company upgrade its technological competence and investment capital, develop high-quality composite material products with valuable civilian applications, and invest in defense affairs departments, we can expect to further expand derivative production benefits.

(3) Research and manufacture of unmanned remote-controlled target planes

Grand Wing Servo Tech Co. focused on the research and sales of recreational remote-controlled models (including planes, cars, boats) in the past. To increase the added value and recreational level of their products, they participated in the commercialized plan for the research and manufacture of small military unmanned remote-controlled target plane systems. They effectively raised research capacity to the level of high-tech extra-LOS target planes, which has enabled aerial environmental monitoring, pollution monitoring, traffic monitoring, spraying of agricultural chemicals, fishery resource control, live artillery ammunition targets, and border patrol. In the future, annual production is expected to be at least 100 vehicles, with a value up to 200 million NTD.

(4) Research and manufacture of active phased array radar signal transmission modules

Mag.Layers Co. and Advanced Ceramic X Corporation, partners in communications and optical electronic technology, were originally contractors for manufacturing passive microwave components for electrical capacitance and inductance. They jointly participated in the commercialized research plan of low-temperature co-fired ceramic (LTCC) transmission modules to develop advanced microwave transmission module manufacturing

technologies for radar systems. They have raised the average industrial standards in LTCC technology to the level of large-area modules and cavity packaging, which can be applied to instant multi-target 3-D monitoring and tracking active phased array radar systems. This allows us to strive for lucrative commercial opportunities in upgrades of anti-missile and war zone defense systems from the US, Europe, Japan, and the armed forces. It is anticipated that, in the future, production value can reach several billion NTD.



## The List of MND departments and agencies Phone numbers

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Contact Numbers of MND Admir	istrative Agencies	Contact Numbers of MND Agencies	
General Political Warfare Bureau	02-23118696	Army Command Headquarters	03-4792111
Armaments Bureau	02-23677652	Kinmen Army Defense Command	0823-32471
Comptroller Bureau	02-23111960	6 <sup>th</sup> Army Command	03-4502101
Medical Affairs Bureau	02-23119729	8 <sup>th</sup> Army Command	07-6691419
Department of Strategic Planning	02-23313523	10 <sup>th</sup> Army Command	04-25814627
Department of Military Justice	02-29338805	AAF Special Operations Command	06-2304201
Department of Manpower	02-23122767	Matzu Army Defense Command	0836-22101
Department of Resources	02-23119927	Huadong Army Defense Command	03-8223103
Department of Legal Affairs	02-23120453	Penghu Army Defense Command	06-9270162
Department of Reserve Affairs	02-23616698	Navy Command Headquarters	02-25333181
Executive Office of the Minister	02-23318391	Naval Fleet Command	07-5813141
Inspection Office	02-23119831	Naval Recruit Training Center	07-5857025
Integrated Assessment Office	02-25337680	Navy Marine Corps Command	07-5815179
Military History Translation Office	02-25327440	Air Force Command Headquarters	02-27111101
Petitions and Appeals Committee	02-23310628	Air Operation Command	02-27326840
Military Personnel Rights Committee	02-23616600	Air Force Air Defense Artillery Command	03-3687273
Office of Joint Operations Training and Doctrine	02-28850627	Combined Logistics Command	02-27854121
Office of the Deputy Chief of the General Staff for Personnel	02-29391910	1 <sup>st</sup> Combined Logistics Regional Support Command	06-9217881
Office of the Deputy Chief of the General Staff for Intelligence	02-23612853	2 <sup>nd</sup> Combined Logistics Regional Support Command	03-8223103
Office of the Deputy Chief of the General Staff for Operations and Planning	02-23313994	3 <sup>rd</sup> Combined Logistics Regional Support Command	03-4502101
Office of the Deputy Chief of the General Staff for Logistics	02-23119912	4 <sup>th</sup> Combined Logistics Regional Support Command	07-6691409
Office of the Deputy Chief of the General Staff for Communications, Electronics and Information	02-23884414	5 <sup>th</sup> Combined Logistics Regional Support Command	04-25814625
0800 toll-free military inquiry pho	one numbers	Reserve Command	02-23111501
MND	1985(direct 4-digit dialing)	Northern Reserve Command Post	02-29412332
Army Command Headquarters	0800-060070 0800-321454	Central Reserve Command Post	04-23116163
Navy Command Headquarters	0800-221760	Southern Reserve Command Post	07-5515275
Air Force Command Headquarters	0800-081400	Military Police Command	02-25972181
Combined Logistics Command	0800-251090	No. 202 Military Police Command Post	02-23119531

### **Epilogue**

Since 1992, the MND has published a defense report every 2 years. This is the 8th publication of the defense report, which is intended to reiterate the emphases of defense policy, encourage transparency in defense information, and actualize all-out defense concepts. More importantly, it expresses the ROC Armed Forces' determination and efforts in defense transformation in the face of current defense challenges. At the same time, it is hoped that, by conveying transformation concepts, the report will encourage the public to devote more care, support, or participation in defense affairs, call on competent youths for military enlistment, and strive for reasonable defense budgets. Moreover, it also hopes to increase international understanding and support for Taiwan's efforts in maintaining the status quo across the Taiwan Strait, enabling Taiwan the opportunity to build "cooperative security" with other members of the "democratic community."

The current edition of the defense report differs from those of the past, which were basically compilations of policy or administrative data from various agencies. In this report, a focused and theme-based editing approach was employed, where defense transformation is the main axis. With the explanatory framework of "Facing the Challenges," "Innovative Transformation," and "All-out Defense," it describes the ROC Armed Forces' facing diverse defense challenges, reveals future directions and current concrete measures of defense transformation, and explains the importance and concrete actions of all-out defense so as to realize the objective of promoting defense transformation and winning public approval.

An innovative means was attempted as the working method for this defense report; a task group model was adopted and the "National Defense Report Project Office" was set up on September 2, 2005. It incorporated relevant internal staff units, administrative agencies, and National Defense University specialists to form a core editing team. Under the direction of consultant counsellers (hiring 30 civilian academic experts) and superiors from various levels, the team was responsible for the conception, composition, coordination, and integration of each part and its chapters. Also, to ensure that the entire report demonstrates consistent contents and iterations yet include diverse consultations and reviews, relevant internal units have performed joint reviews during the editing period. Civilian academic experts and defense counsellers from the Legislative Yuan were also invited on many occasions to participate in group discussions and provide advice for preliminary and repeated reviews on the chapters, summaries, composition themes, and drafts. They assisted in the actual editing of part of the contents in this report to improve the "consistency" and "extensiveness" of the report's overall contents.

Furthermore, in terms of the report's page layout, a more lively and vivid visual design concept served as its foundation and a colorful picture-text editing method was adopted. This increases the richness and readability of the contents with the hope of attracting more readers, so that more people will become interested and passionate in defense affairs, further actualizing the all-out defense concept.

The successful publication of this defense report owes itself to the contributions of full participation from internal units and external academic experts. In the future, the MND will continue to strive for innovation and practicality. To realize the goal of effective public supervision, the MND will enable the public to inspect concrete results of defense policies through the regular publication of defense reports. At the same time, it is hoped that this report will encourage the public to understand defense affairs and build a consensus for all-out defense so as to strengthen the solid foundation of national security.

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