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REGIMES**

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I first would like to express my appreciation for this opportunity to address an issue that is important to the safety and well-being of the United States, Taiwan, and other democracies in the Asia-Pacific region.

In my presentation today, I would like to address the People's Republic of China's growing arsenal of increasingly accurate and lethal conventional ballistic and land attack cruise missiles arrayed against the Republic of China (ROC), or Taiwan, whichever term one prefers to use. I will first address the perceived nature and intent of the PRC in fielding such a force opposite Taiwan. Perhaps most important, however, is to address the strategic, economic, and military effects that these deployments have had on Taiwan, the United States, and others within the region. I will wrap up my remarks with a few issues to consider as you address the PRC's growing political, economic, and military clout within the region.

**Nature of the Challenge**

Conventionally armed short range ballistic missiles (SRBMs) have become a key tool of PRC statecraft. As widely addressed in the public record, the PRC's expanding SRBM inventory is intended to deter or coerce neighbors such as Taiwan. Should Beijing resort to the use of force, conventionally armed ballistic missiles under the Second Artillery, operating jointly with the PLA Air Force and other branches of its armed services, could serve as critical enablers in gaining information dominance, and air and naval superiority in a crisis. Second Artillery conventional doctrine stresses surprise and disarming first strikes to gain the initiative in the opening phase of a conflict.

Planned and programmed a decade ago, the PLA is now believed to have at least 700 conventional surface-to-surface missiles allocated throughout at least seven brigades deployed in southeast China under a unified regional missile command.

Each brigade is said to have between four and six battalions, each with three-four launch companies, each equipped with at least two launchers. With between 75 and 100 new missiles being deployed each year, these missiles are expected to have ranges extending from 300 to 1700 kilometers. The newest generation of conventional ballistic missile may include the DF-21C, a missile that has been under development since 1995. It may be equipped with a terminal guidance system that could preclude engagement by terminal missile defenses. It also could also range U.S. bases in the region, and, armed with a maneuvering payload, could complicate the U.S. carrier operations in the western Pacific. Reporting from Taiwan indicates that the PLA may be deploying about 200 land attack cruise missiles this year, with more coming on line in the years to come.

There are indications that the technical characteristics of these missiles are becoming increasingly sophisticated. Based on technical writings over the years, a number of warhead options may be available, including runway cratering submunitions, penetration warheads for hardened targets, and fuel air explosives. Observers in Taiwan have expressed concern over the possible outfitting of a ballistic missile with a low yield nuclear high altitude electro-magnetic pulse (EMP) warhead, and there are signs of PRC interest in weaponizing a non-nuclear EMP payload. If detonated at a precise location and altitude, both theoretically could have the potential to shut down electric power sources on the island. The precision of PRC conventional is improving as well. At least 10 years ago, PRC missile engineers had been tasked to meet an accuracy requirement of below 50 meters circular error probability (CEP).

PLA doctrine for use of ballistic and land attack cruise missiles against Taiwan highlights a range of potential applications. They could be used in a campaign to deter or coerce Taiwan's political leadership by raising the perceived costs of a policy action deemed inimical to Beijing's interests. These missiles also could be a critical enabler for a PLA landing campaign, targeting command centers, airfields, naval facilities, logistics depots, and critical infrastructure on the island. The intent likely would be to disrupt Taiwan's political and military leaders' ability to control forces under their command, disrupt communications, and rapidly attain air superiority and sea control. PLA doctrinal writings stress surprise and pre-emption, multi-axis attacks, combining ballistic and airbreathing threats, and use of deception and concealment.

### **Strategic, Economic, and Military Effects on Taiwan**

Proceeding as scheduled, the growth of the PLA Second Artillery's conventional ballistic missile forces should not be a surprise. What may be more useful, however, is to take a closer look at the effects that these deployments have had on their potential targets – Taiwan, the United States, and Japan.

At least one purpose of deploying a sizable ballistic missile force opposite Taiwan has been to send a visible signal to the people on Taiwan that in the event an ill-defined red line is crossed, the PRC is prepared to use violence against them and their duly elected government representatives. Beijing has grasped an asymmetrical advantage it has over Taiwan, and has placed the leadership and other residents on the island within seven minutes of destruction. Political authorities in Beijing have threatened and cajoled officials in the Clinton and Bush Administrations not to assist Taiwan through provision of early warning or any other measure that could provide some relief from the psychological intimidation that these missiles are intended to pose. Beijing has feared that linking Taiwan into a U.S.-led missile defense network would in effect constitute a virtual alliance. From Beijing's perspective, such an act would not only violate the 1982 Communiqué, which was intended to curtail the provision defense articles and services to Taiwan, but also the 1979 Communiqué, which called for the abrogation of the 1979 US-ROC Mutual Defense Treaty.

Looking back over the last decade, however, Beijing's strategy has been a dismal failure. The ever-increasing deployment of conventional ballistic missiles has not succeeded in intimidating Taiwan's voters or their elected leaders. In fact, the deployments have only served to further alienate Taiwan's populace from, and raised the level of animosity toward, the PRC's political leadership. Based on media reporting, it also has not deterred the U.S. and Taiwan from establishing operational linkages associated with early warning of ballistic missile launches.

Looking back over the last decade, another intended effect of an expanding conventional ballistic missile force may have been to draw Taiwan into a force-on-force competition. If Beijing hoped to draw Taipei into an arms race as part of a competitive strategy, this also has not succeeded. Over the last four years, Taiwan's leadership has invested at least U.S. \$1 billion into defenses against PRC conventional missiles, including early warning sensors and associated tactical communications, and hardening and repair equipment. Taiwan's political system has yet to come to a consensus regarding upgrades to its existing air defense assets procured from the U.S. more than a decade ago, or acquisition of new U.S. missile defense assets. Local reporting, however, does indicate that Taiwan has invested in the development of its own indigenous active terminal missile defense interceptor, potentially in lieu of a PATRIOT PAC-3 procurement.

The military effects of the missile deployments opposite Taiwan could be significant but not insurmountable. PRC ballistic and land attack cruise missiles may be able to hold at risk unprotected, unhardened facilities, such mobile or unhardened command centers, airfields, naval facilities, and logistics centers. However, one unintended consequence is what seems to be a natural desire among

Taiwan's leadership to seek an asymmetrical means of maintaining some form of a dynamic balance of power through mutually assured political, economic, and military destruction.

To maintain the ability to hold targets on the mainland at risk, Taiwan is said to be nearing completion of its own conventional missile force, including both land attack cruise missiles and a new generation short range ballistic missile. A core competency of Taiwan's is in the realm of computer network operations. With advanced air defenses deployed opposite Taiwan, conventional fixed wing strikes may prove too costly. Development of conventional surface-to-surface missiles may be viewed as a necessity in order to maintain a minimal retaliatory strike capability against mainland targets that has existed since the 1980s.

### **Effects on the United States and Japan**

The PRC's growing arsenal of conventional ballistic and land attack cruise missiles may have an effect on United States' ability to fulfill its legal obligation under the Taiwan Relations Act, which is to maintain the capacity to resist PRC use of force against Taiwan and forms of aggression. Use of ballistic missiles against Taiwan in a coercive or minimum warning invasion scenario complicates U.S. planning. Large scale, minimum warning raids against key facilities on Taiwan has the potential to paralyze its armed forces and could facilitate the insertion of a sizable PLA force onto the island before U.S. forces could be brought to bear in the area of operations. Assuming it has the means of tracking and targeting ships at sea, successful deployment of the DF-21C and extended range SRBMs with maneuvering re-entry vehicles could hold at risk U.S. carrier battle groups intervening in a crisis. They also could hamper U.S. air operations from Okinawa and other facilities on Japanese territory.

However, the most significant effect of the growing missile force is political and symbolic in nature. With the substantial conventional ballistic force opposite Taiwan, and the island's political leaders seeming inability to arrive at a consensus regarding the acquisition of missile defenses to counter that threat, many in the U.S. have perceived that Taiwan's elected officials are not sufficiently committed to the island's defense. The ballistic missile buildup, which is easily quantified in numbers of missiles arrayed against Taiwan, serves as the most tangible symbol of the PRC's broader military modernization program. And Taiwan's investment into missile defenses would serve as a symbolic response to PRC intimidation. However, as a political symbol, missile defense, along with the other two items contained in the Chen Shui-bian Administration's special budget submission to the Legislative Yuan, have been held hostage to a broader political and economic debate.

A limited procurement of U.S. missile defense assets likely would help undercut the coercive utility of PRC ballistic missiles and complicate Beijing's force planning for limited strikes. However, the fact is that Taiwan is committed to its defense. Anyone with homes and families in Taiwan is concerned about maintaining an ability to counter the growing PRC military threat, with ballistic missiles being its most visible manifestation. Since June 2004, the special budget has become one of several illusive symbolic issues in Taiwan's domestic political competition. U.S. frustration over the lack of spending on U.S. systems has fed a growing perception in Taiwan's society that the United States is valuating the ROC based on its defense expenditures rather than the democratic ideals and principles upon which America was founded.

What is often missed is that Taiwan's official defense budget does not reflect the actual amount of resources that are being spent. Taiwan allocates at least U.S. \$12 billion – about 3.6% of Taiwan's per capita GDP – to its defense. This amount is about U.S. \$4 billion over the official annual budget of just under U.S. \$8 billion, when one adds in military pensions covered by a different agency outside the Ministry of National Defense, R&D expenses covered under the National Science Council budget, and about U.S. \$1 billion a year over the last four years for a military housing project. This figure likely would rise even more if one applies the same scrutiny to Taiwan's defense spending as is dedicated to that the PRC's defense spending.

The debate over special budget, including a program for countering the growing missile build-up, should not symbolize a lack of commitment to Taiwan's defense. If anything, the defense budget debate is a manifestation of the vast complexities associated with a transitional democracy and potential structural problems associated with Taiwan's system of government. And, perhaps most important, the standoff has stemmed from fundamental differences over how to best manage limited economic resources to ensure the long term survival of Taiwan's democracy in an environment characterized by contradictory trends of globalization and localization, and increased interaction between the two sides of the Taiwan Strait.

## **Summary**

In summary, the PRC's growing arsenal of increasingly accurate and lethal conventional ballistic and lack attack cruise missiles is a central aspect of Beijing's strategy against Taiwan and potential foreign intervening forces. The intended strategic, economic, and military effects have proved ineffective in intimidating the people on Taiwan, or their democratically elected leaders. Linkages between Taiwan's own potential deployment of advanced surface-to-

surface missiles and Beijing's growing deployment of offensive strike assets are clear.

While it seems appropriate to many in the U.S. that Taiwan should take decisive steps to undercut the coercive utility of the PRC's ballistic missiles, taxpayers and voters on the island have the right to determine how best to utilize their own resources in an increasingly constrained environment. They are the best qualified to judge what their requirements are, in an atmosphere free from outside coercion. When able to transcend the irrationality that often accompanies a democratic form of government, there is a basic consensus regarding what Taiwan's requires for adequate self-defense within the context of Taiwan's broader national interests.

In addressing the U.S.' role in providing Taiwan with the necessary defense articles and services, including the ability to counter the growing missile threat, I offer one consideration. Like Japan and other advanced economies, Taiwan may be endowed with competitive advantages that could contribute to U.S. missile defense development and other defense industrial programs. Greater defense industrial defense cooperation between U.S. and Taiwan industry on defense programs, thus creating jobs and income for domestic constituencies on both sides of the Pacific, may encourage greater expenditures on defense. Faced with the downturn in its economic situation in 2001, the ROC has decided to shore up its defense industry as a means to sustain economic growth while also ensuring a sufficient self-defense capability.

In order to create a more favorable environment for greater defense industrial cooperation, one measure for your consideration is for U.S. government entities, such as the Department of Commerce, to assist Taiwan's government to further enhance its already existing export control system to better prevent unauthorized third party transfers of the U.S. technology. Taiwan's economic health may be as important, if not more so, than its defense in ensuring the long term survival of its democracy.