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**SHIFTING PARADIGMS:  
TAIWAN'S NEW ASYMMETRIC STRATEGY TO DETER BLOCKADE**

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Growing economic interdependence and China's development of effective anti-access technology raise the cost for the United States of intervening on Taiwan's behalf in a Cross-Strait conflict. Additionally, China's growing military power challenges Taiwan's ability to unilaterally break or deter a PRC naval blockade. These trends call into question the U.S. commitment to Taiwan and increase the risk of Chinese adventurism, which would force the United States to choose between two poor options – direct and costly military intervention against a needed international partner, China, or abandonment of Taiwan.

Given these considerations, the United States must help Taiwan develop a self-sufficient means of deterring or defeating a Chinese blockade without seriously harming U.S.-PRC relations. To this end, this brief proposes that the United States encourage and help Taiwan adopt a "Focused Lifeline" strategy, in which Taiwan has the capability to maintain at least one sea line of communication open out to twelve nautical miles. This strategy requires that the United States provide Taiwan with capable – but degraded – destroyers, contingent on Taiwan's building stockpiles of critical supplies and improving the capacity of its East Coast harbor at Hualien.

**U.S. Strategic Goals for Taiwan and China**

The United States is torn by competing goals with respect to China and Taiwan. It seeks to maintain cooperative economic and political relations with China and is committed to the "One China" policy and the eventual cessation of arms sales to Taiwan. However, the Taiwan Relations Act also commits the United States to helping Taiwan maintain its independence and resist coercion, while financial and political factors in both countries preclude the United States from an unlimited commitment to Taiwan's defense.<sup>1</sup> U.S. policy toward Taiwan must therefore:

- *Improve Taiwan's defense:* U.S. arms sales must substantively increase Taiwan's defense, rather than simply meet the legal requirements of the TRA.
- *Maintain a cooperative relationship with China:* The United States must minimize political fallout from China by weighing the benefit of action against its political cost.

- *Remain within domestic fiscal constraints:* All policies must achieve the maximum deterrent effect for the lowest cost possible.

## **Taiwan Faces Economic Strangulation**

An expanding arsenal of short-range ballistic missiles, the development of an anti-ship ballistic missile, and improvements to its submarine fleet have significantly increased China's ability to project military power across the Taiwan Strait and asymmetrically threaten U.S. forces in the region.<sup>2</sup> These developments have the following implications:

1) *U.S. deterrence through denial is less credible:*

Advances in Chinese anti-access capabilities and technologies raise the cost of any direct U.S. military intervention and, therefore, decrease the United States' willingness to act militarily against China.<sup>3</sup> Additionally, the United States increasingly views China as a key strategic partner in resolving global issues such as the current financial crisis, climate change, and non-proliferation. China's ability to link these goals to conflict over Taiwan influences its perception of U.S. resolve and negatively impacts the credibility of U.S. deterrence.

2) *Taiwan cannot deter China through conventional punishment:*

Taiwanese efforts to deter China through asymmetric means such as counter-blockade, cruise missile strikes, or submarine attacks on merchant shipping are either infeasible or ineffective, and may threaten confidence building measures by requiring Taiwan to develop inherently offensive weapons. Since Taiwan's long-term security rests as much on reducing Cross-Strait tension as it does on the ability to defend itself, it should weigh the benefit of additional offensive weaponry against the risk of entering an arms race with China. Beyond inefficacy, Taiwan also faces substantial obstacles to acquiring a sufficient submarine force, without which it cannot threaten an effective mine-based counter-blockade.<sup>4</sup>

For China, the benefits of fully reincorporating Taiwan far outweigh the costs of enforcing a blockade. For example, the Ministry of National Defense could significantly decrease or redeploy the military resources it now allocates opposite Taiwan, while the Chinese Communist Party would receive considerable domestic support for accomplishing a major national goal. Therefore, China's willingness to accept punishment and sustain a blockade would likely outlast Taiwan's ability to survive one.

3) *Taiwan cannot completely deny a Chinese blockade:*

Substantial increases in Chinese missile and fighter capabilities threaten to disable Taiwan's air force on the ground and challenge the air superiority necessary for Taiwan's anti-submarine warfare operations.<sup>5</sup> China's increasingly sophisticated submarine and surface forces likewise expand the potential for a sustained blockade. Taiwan's heavy

reliance on international trade for both its economic growth and food supply render it incapable of simply outlasting a Chinese blockade.<sup>6</sup>

Taiwan is well prepared to defend itself from and deter a Chinese invasion. However, Taiwan's inability to establish surface dominance in the Strait diminishes its capacity to deter a blockade on its own.<sup>7</sup> It remains almost entirely dependent on U.S. assurances to break a joint air and naval blockade that is supplemented by China's ballistic missile forces.<sup>8</sup> Therefore, without a U.S. commitment to deter and counter a blockade, Taiwan is extremely vulnerable to coercion and less capable of negotiating a political resolution with China.

## Policy Options

Taiwan can pursue several strategies in response to the shifting military balance in the Strait and decreasing U.S. willingness to intervene militarily. It can continue the strategic vision outlined in the Taiwanese Quadrennial Defense Review (QDR), pursue an alternate asymmetric "Porcupine Strategy," attempt to deter China by increasing its ability to punish coercion, or utilize a "Focused Lifeline" strategy to deter China by establishing a credible means of denying the option of a successful blockade.<sup>9</sup> Of these four options, only the "Focused Lifeline" strategy is likely to be effective in light of the constraints Taiwan faces.

### 1) *Pursue the "Hard ROC" strategy outlined in the Taiwanese 2009 QDR*<sup>10</sup>:

The 2009 QDR recognizes the dangers Chinese military advancements pose to Taiwan and outlines a broad strategy to adapt to them. Significant steps include a shift to an all-volunteer force military by 2014 and efforts to enhance "intangible" military assets such as morale and commitment to total defense. Additionally, the QDR proposes a series of acquisitions intended to provide Taiwan with some punishment based deterrence through a partial blockade capability, notably submarines. The QDR seeks to decrease the likelihood that China can maintain air superiority by acquiring additional fighters, hardening critical infrastructure, and building redundancies to counter Chinese SRBMs.

Strengths: The QDR identifies the conventional military threats presented by China – invasion, surgical strikes, and blockade – and proposes effective strategies to deter or defend against the first two. Moreover, the QDR acknowledges the reality that Taiwan may have to defend itself without direct support from the United States. The development of an all-volunteer force and the implementation of asymmetric counters to Chinese air power such as mobile surface-to-air missile (SAM) units will be very effective at prohibitively raising the cost of an invasion, thereby effecting deterrence.

Weaknesses: The QDR provides an unrealistic assessment of China's most likely course of action as well as Taiwan's ability to counter Chinese military developments through the acquisition of sophisticated military technology of its own. In particular, Taiwan's vision for "fiber optics, nano technology, precision guidance, stealth," and other advanced technology fails to address Taiwan's most

critical vulnerabilities and institutionalizes the continued misallocation of scarce resources.<sup>11</sup> Such high-technology assets as submarines, the F-16 C/D, and the F-35 would absorb the majority of defense spending, damage confidence building measures, and remain ineffective in the face of asymmetric counters like China's ballistic missile arsenal.

The QDR outlines an effective, albeit expensive, strategy for ensuring Taiwan's continued ability to resist an invasion. However, it fails to deliver a means for Taiwan to break a blockade without direct U.S. intervention.

2) *Pursue an asymmetric "Porcupine Strategy":*

The last three U.S. arms sales to Taiwan reflect steps taken by both nations to bolster deterrence against an invasion or air campaign through a "Porcupine Strategy" in which Taiwan improves its asymmetric air and amphibious landing defenses.<sup>12</sup> Advocates of this strategy note the delicate balance between Taiwan's short-term efforts to boost defense capabilities and its long-term goal of improving Cross-Strait relations. Proponents also argue that Taiwan should cease expensive symmetric attempts to balance against China and urge drastic revisions to Taiwan's defense spending toward a strategy emphasizing defense at the beaches and air-denial through mobile SAMs, ultimately ceding to the inevitable loss of air supremacy.

Strengths: The "Porcupine Strategy" provides an excellent means for Taiwan to continue deterring a Chinese invasion or bombing campaign. By relying on asymmetric, inexpensive means of deterrence such as mobile SAMs, anti-ship cruise missiles, surf-zone mines, and hardened critical infrastructure, this strategy provides an economically effective answer to Chinese asymmetric counters to Taiwan's conventional military power, such as SRBMs.<sup>13</sup>

Weaknesses: This strategy leaves Taiwan extremely vulnerable to coercion and even forced capitulation by ceding control of the Strait and offering no viable means for deterring China from enforcing a blockade. Unable to project defensive power beyond its immediate shores, Taiwan would be forced to rely on the increasingly questionable U.S. willingness to break or deter a Chinese blockade.

3) *Strengthen conventional deterrence through punishment:*

Taiwan's potential to credibly threaten counter-blockades and missile strikes on military, civilian, or culturally iconic targets is reinforced with its *Hsiung-Feng II* cruise missile program as described in the QDR.<sup>14</sup> By expanding this program and acquiring submarines, Taiwan could threaten deterrence through punishment as an asymmetric counter to Chinese military advances. Following the initial investment, this strategy would provide an inexpensive means for responding to future Chinese developments.

However, as noted earlier, Taiwan currently has no viable means of obtaining the additional submarines necessary to enforce a counter-blockade.<sup>15</sup> The United States navy does not possess any diesel submarines, and efforts to restart manufacturing have been met with significant obstacles.<sup>16</sup> Furthermore, even if Taiwan could credibly threaten a blockade of some Chinese ports, a partial blockade and missile strikes alone would be unlikely to raise the cost of coercion beyond what China is willing to accept to force Taiwan's capitulation.

4) *Adopt a "Focused Lifeline" strategy to deny China a blockade strategic option:*

The United States should assist Taiwan in executing an asymmetric strategy to guarantee open sea lines of communication out to twelve nautical miles. To ensure U.S. ships are not required to intervene directly in waters China could claim as its own, the United States would commit only to its historic position on freedom of the seas and guarantee merchant shipping beyond 12 nm. Taiwan would still be responsible for escorting shipping within its territorial waters. This strategy would use three means to enhance deterrence:

- *Stockpile critical resources:* Taiwan must stockpile critical resources, specifically food and oil supplies, to increase the cost for China to sustain a blockade and lengthen the time that is necessary for it to force Taiwan's capitulation.
- *Improve port defense and logistics infrastructure:* Taiwan must significantly improve infrastructure and defensive capabilities at the ports of Keelung and Kaohsiung. Taiwan should also improve port capacity at Hualien and expand the port's supply routes to the West Coast. These ports must be able to resist significant ballistic missile and aerial attacks, using PAC III missile batteries, redundancies in critical infrastructure, and hardened defenses. Taiwan should be able to maintain at least one operational port and the logistics infrastructure necessary to transport vital food supplies to heavy population centers at all times.
- *Use destroyers to control a narrow sea line of communication:* Contingent on the realization of the previous two directives, the United States should provide Taiwan surface combatants sufficient to win isolated naval battles. The primary mission of these ships would be to conduct anti-submarine warfare, taking advantage of China's need to blockade multiple ports simultaneously. Based on an assessment of Taiwan's defensive needs, the U.S. should make available a degraded form of the *Arleigh Burke*-class destroyer with the controversial *AEGIS* system removed.<sup>17</sup>

Strengths: The "Focused Lifeline" provides Taiwan a means for maintaining one open sea line of communication at any given time in an asymmetric strategy that utilizes the advantages of Taiwan's geographical location. By instilling doubt of outcome, Taiwan can deter China from engaging in a blockade without relying on

the U.S. commitment to intervene militarily. The strategy also leaves Taiwan more room for parallel confidence building measures by refraining from a denial by punishment strategy.

Weaknesses: Even with this strategy, China could still threaten significant economic damage by closing down some of Taiwan's ports and driving up the cost of shipping insurance. While the strategy as a whole provides an asymmetric counter to Chinese military developments, growing Chinese naval power will continue to challenge the ability of Taiwan to maintain an open corridor on its own, requiring further and continued arms sales by the United States.

### **Striking a Balance between Taiwan and China**

The United States should not seek to alter the political status quo across the Strait and should remain agnostic on a final resolution, so long as it is agreed upon peacefully between Taiwan and China. Therefore, U.S. assistance to Taiwan should be sufficient only to ensure its short-term security without engendering Taiwanese overconfidence. In a "Focused Lifeline" strategy, the United States would retain the ability to refuse escort to merchant shipping if Taiwan unilaterally sought independence, while Chinese aggression would automatically trigger U.S. support. Taiwan would thus have a self-sufficient deterrent but no incentive to depart from a "One China" policy, allowing Taiwan time to cajole China into negotiating in good faith even as it refuses to commit to Taiwan's demand for "no use of force."<sup>18</sup>

The United States must confine its arms sales to Taiwan to those technologies that directly improve Taiwan's defense. Since even the sale of degraded *Arleigh Burke*-class destroyers will likely spark Chinese opposition, the United States should take parallel steps to mitigate political fallout by more effectively allocating spending toward Taiwan's defense. In particular, the United States should *not* sell Taiwan any platforms intended as symmetric counters to Chinese air or missile power, such as F-16 C/Ds, additional PAC missile batteries, or ASW assets that require air superiority, notably the P-3C.<sup>19</sup> By forgoing these expensive platforms, Taiwan can fully fund the steps necessary to deter a Chinese blockade.

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<sup>1</sup> Glaser, Bonnie. *Debunking Myths about U.S. Arms Sales to Taiwan*. Center for Strategic and International Studies. Retrieved March 28, 2010. <<http://csis.org/files/publication/pac1006.pdf>>

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<sup>2</sup> Erickson, Andrew S. and David D. Yang. *Using the Land to Control the Sea?* Naval War College Review 62:4 (Autumn 2009). See specifically page 65. Chinese development of the ASBM threatens to render aircraft carriers inoperable in a contingency without destroying them, providing China a deterrent capability that would still leave the decision to escalate with the United States.

<sup>3</sup> In addition to military means, China could also threaten cyber or economic retaliation as a means of deterrence. While both of these strategies could be reciprocated by the United States, the increased cost of military intervention and potential for escalation will make U.S. deterrence less credible.

<sup>4</sup> Minnick, Wendell. *Taiwan to Build Own Diesel Subs*, Defense News 13 April 2009. Retrieved March 28, 2010. <<http://www.defensenews.com/story.php?i=4035332>> The United States agreed in 2001 to sell diesel submarines to Taiwan. Despite the 2009 QDR's optimism over developing an indigenous submarine in the near future, Taiwan currently lacks the capability to produce a suitable submarine line.

<sup>5</sup> Shlapak, David A, David T. Orletsky, Toy I. Reid, Murray Scot Tanner, and Barry Wilson. *A Question of Balance: Political Context and Military Aspects of the China-Taiwan Dispute*. RAND Corporation (2009): pp. 31-86. The RAND study estimates that even using the least accurate missiles available, China could render all of Taiwan's airfields inoperable for a period of hours to days with 100 missiles – half of one salvo.

<sup>6</sup> Glosney, Michael A. *Strangulation from the Sea? A PRC Submarine Blockade of Taiwan*. International Security 28:4 (Spring 2004): pp. 125-160. In addition to being dependent on trade for its economy, Taiwan receives up to 90% of its food from international trade, while China has substantial domestic food production.

<sup>7</sup> Holmes, James R. and Toshi Yoshihara. *Taiwan's Navy: Still in Command of the Sea?* China Brief X:6 (March 2010): pp. 9-11. Retrieved April 1, 2010. <[http://www.jamestown.org/uploads/media/cb\\_010\\_29.pdf](http://www.jamestown.org/uploads/media/cb_010_29.pdf)>

<sup>8</sup> Shlapak et al. A Chinese blockade would involve heavy use of submarines and mines to threaten shipping while avoiding Taiwan's sophisticated anti-ship cruise missiles. A rapid campaign for air superiority would last at most four days before the United States had time to respond. With Taiwanese air forces suppressed, battle for surface control would likely occur only in the Strait with China seeking to use its relative air superiority to its advantage.

<sup>9</sup> William, Murray S. *Revisiting Taiwan's Defense Strategy*. Naval War College Review (Summer 2008.) "Porcupine Strategy" is a term used by Murray to describe a Taiwanese asymmetric defense against invasion.

<sup>10</sup> Quadrennial Defense Review 2009, Ministry of National Defense. Retrieved March 28, 2010. <[http://www.mnd.gov.tw/QDR/en\\_menu.htm](http://www.mnd.gov.tw/QDR/en_menu.htm)>

<sup>11</sup> *Ibid*, pg. 92.

<sup>12</sup> Kan, Shirley A. *Taiwan: Major U.S. Arms Sales Since 1990*. Congressional Research Service pp. 58-62. Retrieved March 28, 2010. <<http://www.fas.org/spp/crs/weapons/RL30957.pdf>>. In particular, the sales of *Harpoon* ASCMs and AH-64D Apache Longbow Attack Helicopters were intended to increase anti-landing capabilities.

<sup>13</sup> In contrast to the QDR, according to the "Porcupine Strategy" Taiwan's response to Chinese SRBMs is not to quantitatively increase its air force but rather accept the loss of air superiority as beyond its control.

<sup>14</sup> Minnick, Wendell. *Taiwan Continues Cruise Missile Effort*. Defense News 23 March 2009. Retrieved March 28, 2010. <<http://www.defensenews.com/story.php?i=4001377>>

<sup>15</sup> *Jane's Fighting Ships*, 2007-2008. Taiwan has two *Hai-Lung* Class submarines purchased from the Netherlands in 1987 and 1988. Additionally, Taiwan has two *Guppy II*-Class submarines used for training purposes.

<sup>16</sup> Kan, pp. 10-14. The United States does not currently possess a diesel submarine manufacturing line and there is significant opposition from the U.S. navy to restarting one. Also, disagreement between the Taiwanese Legislative Yuan and U.S. Congress on who should pay start up costs hampers efforts to restart the line. Friendly nations such as Germany and the Netherlands will not sell to Taiwan for fear of retribution from China.

<sup>17</sup> Any destroyer sales to Taiwan must account for the large quantitative advantage enjoyed by China's submarine fleet and provide effective ASW capabilities while being resistant to Chinese air power and asymmetric responses, such as the ASBM. The *Arleigh Burke*-Class destroyer would satisfy these needs, while the potential for additional domestic job creation makes them more politically feasible. Furthermore, the destroyers, while initially expensive, operate with a crew of only 278 compared with the *Kidd*-Class destroyer's personnel of 363, decreasing operating costs and meeting the demands of Taiwan's upcoming shift to a volunteer military. Since their primary mission would be to conduct ASW operations and maintain clear SLOCs, the *AEGIS* system could be removed to reduce political fallout from China without significantly diminishing its efficacy. The *AEGIS* system could later be added based on operational necessity.

<sup>18</sup> Cossa, Ralph A. *Cross-Strait Relations: Ma's "Three No's"*. Center for Strategic and International Studies (Jan 2008). Retrieved April 3, 2010. <<http://csis.org/files/media/csispubs/pac0806.pdf>>.

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<sup>19</sup> Murray, *Revisiting Taiwan's Defense Strategy*. Shlapak et al. *A Question of Balance*. As noted earlier, China could reliably disable Taiwanese air fields with approximately 100 SRBMs. Taiwan could significantly increase the number required by improving ABM defenses; however, the PAC II and PAC III missiles are extremely expensive and could be overwhelmed by continued salvos or targeted strikes on their fixed radar sites. Ultimately, China can compensate at far lower cost for Taiwan's improved ABM capabilities through further development and deployment of SRBMs. Given this dynamic, Taiwan is unlikely to retain aircraft operating surfaces even after bolstering ABM defenses, so it cannot make effective use of F-16s, F-35s, or P-3Cs. Taiwan should instead bolster missile resistant means of defense, such as the "Focused Lifeline" strategy described above.

