

**POLICY BRIEFS • 2009-2010** 

The Project on International Peace and Security (PIPS) at the College of William and Mary is a highly selective undergraduate think tank designed to bridge the gap between the academic and policy communities in the area of undergraduate education. The goal of PIPS is to demonstrate that elite students, working with faculty and members of the policy community, can make a meaningful contribution to policy debates. The briefs enclosed are a testament to that mission and the talent, creativity, and rigor of William and Mary's undergraduates.

PIPS would like to thank the Andrew Mellon Foundation, The Weingartner Global Initiative, the Roy R. Charles Center, and the College of Arts and Sciences at the College of William and Mary for their support.

Amy Oakes, Director Dennis A. Smith, Director

The Project on International Peace and Security
The Institute for Theory and Practice of International Relations
Government Department
The College of William and Mary
P.O. Box 8795
Williamsburg, VA 23187-8795
757.221.5086
pips@wm.edu

# TABLE OF CONTENTS

ALEXANDER BELLAH, "SHIFTING PARADIGMS:  TAIWAN'S NEW ASYMMETRIC STRATEGY TO DETER BLOCKADE"	.1
RAYMOND CIABATTONI, "MODIFYING THE MADRASSA: PROMOTING MODERATE ISLAMIC EDUCATION"	.9
LEVENT KIRAN, "A DIFFERENT FIGHT:  NARCO-COMMERCIALIST INSURGENCIES IN MEXICO"	.7
MEGAN LIABOE, "AFGHANISTAN AND THE SEARCH FOR A SUSTAINABLE ECONOMY"	:7
KRISTOPHER McClellan, "America and the Artic Superhighway:  Developing Economic Opportunities in a Warming Artic"	15
HANNAH THORNTON, "COUNTERING RADICALISM WITH A VIRTUAL LIBRARY OF FREEDOM"	13

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

#### ALEXANDER BELLAH

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. 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. 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. 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. 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  $QDR^{10}$ :

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.

<u>Strengths</u>: 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.

<u>Weaknesses</u>: 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. 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. 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.

<u>Strengths</u>: 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>

<u>Weaknesses</u>: 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. The United States navy does not possess any diesel submarines, and efforts to restart manufacturing have been met with significant obstacles. 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>

<u>Strengths</u>: 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.

<u>Weaknesses</u>: 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." 18

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. By forgoing these expensive platforms, Taiwan can fully fund the steps necessary to deter a Chinese blockade.

\_

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

<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> Minnik, Wendell. *Taiwan to Build Own Diesel Subs*, <u>Defense News</u> 13 April 2009. Retrieved March 28, 2010. <a href="http://www.defensenews.com/story.php?i=4035332.">http://www.defensenews.com/story.php?i=4035332.</a> 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*. <u>International Security</u> 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. <a href="http://www.jamestown.org/uploads/media/cb\_010\_29.pdf">http://www.jamestown.org/uploads/media/cb\_010\_29.pdf</a>

<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*. <u>Naval War College Review</u> (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. <a href="http://www.mnd.gov.tw/ODR/en">http://www.mnd.gov.tw/ODR/en</a> menu.htm>

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

<sup>12</sup>Kan, Shirley A. *Taiwan: Major U.S. Arms Sales Since 1990*. <u>Congressional Research Service</u> pp. 58-62. Retrieved March 28. 2010. <a href="http://www.fas.org/sgp/crs/weapons/RL30957.pdf">http://www.fas.org/sgp/crs/weapons/RL30957.pdf</a>. 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.

14 Minnick, Wendell. *Taiwan Continues Cruise Missile Effort*. <u>Defense News</u> 23 March 2009. Retrieved March 28,

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

<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.

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. <a href="http://csis.org/files/media/csis/pubs/pac0806.pdf">http://csis.org/files/media/csis/pubs/pac0806.pdf</a>>.

<sup>&</sup>lt;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>&</sup>lt;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 cites. 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.

# MODIFYING THE MADRASSA: PROMOTING MODERATE ISLAMIC EDUCATION

#### RAYMOND CIABATTONI

Radical Islamists exploit weak educational systems in the Middle East and around the world to promote fundamentalist forms of Islam through economically self-sustaining private religious schools. These schools are created with a one-time capital outlay and are sustained by a constant flow of revenue from community businesses built around the madrassa. Generally, graduates of radical madrassas fail to learn useful vocational skills, remain poor, and practice intolerant ideologies, making them ready recruits for radical organizations. Existing top-down approaches to reforming education systems in the Middle East have been unable to combat this grassroots problem. This brief - using Pakistan as a case study - proposes the creation of a micro-financing institution to fund financially independent, moderate schools based on the same economic approach currently used by radical Islamist groups.

#### **Weak Public Education Systems**

In establishing their schools, radical Islamist groups capitalize on weak, non-existent, or exclusionary public education systems in and outside the Middle East. These schools serve as holistic centers that cater to the physical, spiritual, and intellectual needs of their students. The madrassas teach the *Dars-e-Nazami* curriculum of over 20 subjects, half of which are religious.<sup>2</sup>

Case Study – Pakistan: The public education system in Pakistan is underfunded, overcrowded, and poorly administered. Rampant corruption deprives the public education system of much needed funds. Not surprisingly, 45% of Pakistanis are dissatisfied with government education services in their area.<sup>3</sup> The following statistics illustrate the dire state of Pakistani public education:

- The Pakistani government spends 2.6% of its GDP on public education (ranking 155<sup>th</sup> out of 182 countries).<sup>4</sup>
- The World Economic Forum ranked Pakistan's basic education 128<sup>th</sup> out of 133 countries and higher education at 118<sup>th</sup>.
- Over 12,737 educational institutions out of 164,579 public sector schools in the country are non-functional "ghost schools." 6
- The system is under significant strain with only a 60% attendance rate.<sup>7</sup>

• The student-teacher ratio is more than 40:1 and worsening, compared to the worldwide average of 18:1.8

#### Madrassa Connections to Terrorism and Violence

Since the 1980s, radical madrassas in Pakistan have proliferated at a rapid pace. In January 2007, Pakistan's Interior Minister Aftab Ahmed Khan Sherpao announced that there were 13,500 madrassas, of which 12,006 had been officially registered with the government. This official count is conservative and is not a true representation of the proliferation of madrassas in Pakistan:

- One estimate places the number of madrassas in Pakistan closer to 73,000. 10
- A study found that children in 2004 were 59% more likely to be enrolled in a madrassa than in 2002. 11

<u>Jihadi Connection</u>: Though not all madrassas are radical, 10-15% of them have been linked to radical Islamic organizations. <sup>12</sup> The radical madrassas have a large impact on the communities around them, producing "religious entrepreneurs" who justify violence against people who believe differently than they do. <sup>13</sup> Another byproduct of radical madrassas are the creation of communities supportive of jihadi causes, which provide radicals with hideouts, meeting sites, logistical, support, or other assistance. <sup>14</sup> Madrassas serve as a valuable recruiting tool for extremist organizations.

- Madrassas have been supported or operated by Egypt's *Ikhwan-ul Muslimeen*, Indonesia's *Jemmah Islamiya*, Algeria's Islamic Salvation Front, and the Philippines' Aby Sayyaf group, all of whom extend support to al-Qaeda. <sup>15</sup>
- The *Jamiat-ul-Ulama-i-Islam* madrassas provide a steady source of recruits for the Taliban. <sup>16</sup>

<u>Sectarian Violence</u>: The madrassa system promotes sectarian violence. <sup>17</sup> Currently, five national networks of madrassas in Pakistan are vying amongst each other for prominence. <sup>18</sup> This competition contributes to the proliferation of radical madrassas, which condones violent acts against other sects. These radical schools attempt to demonstrate their relative superiority by violently antagonizing those who believe in rival ideologies. A study of the Ahmedpur East region of Pakistan shows that as madrassa density per capita rises, incidences of civil unrest and violence also increase. <sup>19</sup> Militant sectarian organizations closely associated with madrassas include: *Sipahe Sahaba Pakistan, Sunni Tehrik*, and *Jamaat-i-Islami* among many others. <sup>20</sup>

#### The "Madrassa Model"

Islamist groups create madrassas that operate independent of an external funding source through constant revenue streams from community businesses. Beyond an initial capital outlay,

madrassas fund their continued operation and subsidize education costs through the establishment of businesses. These businesses, built in areas around the madrassa, have led to the success and continued proliferation of these schools. The whole cycle starts again as graduated mullahs from these schools start madrassas in other communities.

- Step 1: *Real Estate* Mullahs invoke a "divine right" to build madrassas on illegally occupied state and private land. <sup>21</sup> The land taken is usually prime real-estate set-aside for park, commercial, or residential development. Communities may witnesses several land seizures as every sect claims their right to a mosque
- Step 2: *Initial Setup* Fundamentalist foundations often fund madrassa construction. <sup>22</sup> Charitable donations (*zakat*) from local businessmen and Friday prayer services help finance operations during and after the initial construction. Once sufficient capital has been raised for the specific project, a mosque is constructed, quickly followed by an adjacent madrassa.
- Step 3: Sustainable Economic Activity Madrassas build clusters of shops in the surrounding area to provide a regular source of income. Madrassas run a variety of profit-bearing enterprises that allows them to be independent of any external funding source.
  - One madrassa in Karachi, Pakistan "runs and owns a female madrassa, an English-medium Islamic school, a medical clinic, a restaurant, and a computer centre."<sup>23</sup>

## **Policy Options**

### Option A: Reform the Pakistani Public Education System

Last year, the U.S. government spent \$125 million on educational activities in Pakistan, mainly focused on improving higher education and reforming the Pakistani Education Ministry. The U.S. approach is a top-down strategy that seeks to improve access to universities and enhance government management of the public education system. Since 2002, USAID has provided roughly \$700 million to reform Pakistani public education. This money finances individual scholarships, supports teacher training, funds school construction, and subsidizes local and federal education ministries. Unfortunately, the Pakistani education system continues to underperform compared to peer countries of similar levels of per capita GDP per and shows few signs of improvement.

The top-down approach has failed in Pakistan because of corruption, weak government control in the countryside, and limited government accountability:

• Limited Accountability: No means exist to track funds distributed to the Pakistani government. USAID has sought to overcome this challenge by using NGOs currently operating in Pakistan to construct schools. However, education is not the top priority

of many of these NGOs. They are generally American-based organizations that focus on other development related projects, but pursue educational ventures to increase their funding. <sup>26</sup> Funds could be more efficiently spent by supporting NGOs that specialize in education, instead of only having education as minor part of a wide range of other development projects.

Corruption: Rampant corruption has limited the effectiveness of funds provided to
the Pakistani government. Local Pakistani officials and administrators in the public
education system consistently siphon off education funds for personal gain. As a
result, the aid does not reach local education systems, particularly in the remote
countryside. At best, top-down policies can only mitigate some of the effects of
radical madrassas because they are unable to attack the root of a community-based
movement.<sup>27</sup>

## Option B: NGO-Administered Schools

Regional and national NGOs working in Pakistan have successfully established schools, but have had difficulty sustaining operations beyond the first few years. NGOs are beholden to the preferences of donors. They must change their focus and geographical region in order to secure funding. Physical Region in order to secure funding.

- *Funding*: NGOs initially receive money from local, regional, and international donors to establish a school. When donors stop giving money for a particular school, NGOs move to other areas of donor interest, and newly-created schools are consequently left to fend for themselves. Many times, they abandon their schools after project cycles have run their course.<sup>30</sup>
- Focus on Informal Education: Due to limited time and resources, many NGOs champion informal education. These schools generally try to establish "functional literacy," giving their students the bare minimum education needed to be productive members of society. As a result, they fail to give their students skills that will garner them a job, or help them in their everyday life. This failure produces literate, but unemployed individuals who are susceptible to the propaganda of extremist groups.

### Option C: Establish a Micro-Lending Institution - Adapting the "Madrassa Model"

Moderate Muslim education can directly compete with radical madrassas for students using the same economically self-sustaining model. To succeed, moderate schools must have an analogous funding source. This brief proposes the creation of a Middle Eastern micro financing institution (MFI) with the specific purpose of funding moderate Islamic and technical education using the "madrassa model".

- Step 1: *Establish the Micro-Finance Institution* Moderate schools need a source of initial capital. MFIs, such as First MicroFinanceBank Ltd. of Pakistan, are not currently involved in establishing schools. A new regional MFI should be created whose specific purpose is the promotion of moderate religious and technical education. The MFI must be an independent organization, without any direct links to the United States. The new MFI could be created with the cooperation of existing microfinancing organizations, such as the South Asian Microfinance Network and the Aga Khan Agency for Microfinance.
- Step 2: *Establishing a School* An established NGO operating in Pakistan requests funds from the new MFI.<sup>31</sup> Initially, NGOs that fit certain criteria will be sought out by the MFI with a targeted marketing campaign. As the MFI becomes well known, it will no longer need to solicit applicants as other NGOs will seek this funding. With the funds, the NGO begins the process of community involvement, starting with creating village organizations and culminating in the construction of a school. This process ensures that the school meets the needs of the community and gives the community a stake in its success. The NGO will be responsible for teacher training and monitoring. In order to gain funding from the MFI, the NGO will have to meet the following criteria:
  - Adopt the self-sustaining "madrassa model" through establishing community businesses that will financially support the school,
  - Provide a moderate Islamic education along the lines of Aga Khan Educational Services curriculum.
  - Provide a level of literacy and competency in math to a U.S. grade 6 equivalent,
  - Incorporate a vocational training program into the school, and
  - Provide teacher training.
- Step 3: Sustainable Economic Activity The MFI provides start-up capital for local businesses under the condition that a certain percentage of its revenue go to the operational and maintenance costs of the school. The community, as counterparty to the loan, ensures that businesses uphold their contracts. These enterprises mirror the madrassa's administration-run businesses that support its operations.

## Why the Model Will Work

<u>Demand</u>: Parents will send their children to these new schools because their improved accessibility and quality make them attractive alternatives to radical madrassa education. Studies in Pakistan repeatedly show that parents send their children to schools based on perceived quality and cost.<sup>32</sup> Graduates will value education and be able to work in local businesses, creating a self-promoting mechanism.

<u>Skill-Based Curriculum</u>: The new schools would include practical education that is omitted from traditional madrassa curricula taught in many radical schools. Lessons in the new schools would stress moderate Islam in the context of the modern world.

- Lessons would stress the peaceful, tolerant roots of Islam, and highlight the tensions between militarism and Islamic law.<sup>33</sup>
- Subjects would include: literature, math, sciences, morality and character-building, religious classes based on the Qur'an, Hadith and Fiqh, and technical skills education.<sup>34</sup>
- Skills appropriate to help in regional industries and vocational training opportunities would prepare graduates for productive jobs in the community.

Accountability: The new schools have a multi-tiered accountability system that starts with a specific school all the way to the MFI. Community leaders and the village organizations responsible for the building of the school would be the first tier of accountability. The NGO is the second tier of accountability, maintaining contact with communities and providing regular support visits to the schools to ensure they are operating correctly. The third and final tier would be the MFI, conducting regular audits of the NGO's projects. The oversight system ensures that no extremist schools are funded with the institution's capital.

<u>Government Response</u>: Governments would have few reasons to oppose these new schools because they would fill a gap in a strained education system. Opening an alternative to public education increases overall enrollment without draining students from government schools.<sup>35</sup> The new schools would be registered with the central government, unlike radical madrassas.

Strengths and Complications: The proposed model is flexible, self-sustaining, and free from Western association. The project-by-project nature of the model allows for each school to conform to the needs of the community. Once the schools and businesses are running, they will no longer require any external funding. These schools will be viewed as a legitimate part of the community, not a tool of Western powers. Complications mainly center on the supervision of how granted funds are spent. A rigorous auditing mechanism that ensures the compliance of NGOs and the schools funded must be a key feature of this model.

<sup>2</sup> C. Christine Fair, *Islamic Education in Pakistan*, U.S. Institute of Peace (Washington D.C.: March 2006).

<sup>&</sup>lt;sup>1</sup> Examples of these fundamentalist forms of Islam are the Salafist and Deobandi ideologies.

<sup>&</sup>lt;sup>3</sup> Anne Cackroft, Neil Andersson, Khalid Omer, Noor Ansari, Amir Khan and Ubaid Ullah Chaudhry, *Social audit of delivery of public services: Baseline survey 2002 National Report*, National Reconstruction Bureau, Pakistan. www.ciet.org

<sup>&</sup>lt;sup>4</sup> "Pakistan," CIA World Fact Book, 4 March 2010, <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html">https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html</a> Accessed 22 March 2010.

<sup>&</sup>lt;sup>5</sup> *The Global Competitiveness Report 2009-2010*, Ed. Klaus Schwab, The World Economic Forum: Geneva, Switzerland 2009. <a href="http://www.weforum.org/pdf/GCR09/GCR20092010fullreport.pdf">http://www.weforum.org/pdf/GCR09/GCR20092010fullreport.pdf</a>>

<sup>7</sup> Tahir Andrabi, Jishnu Das, and Asim Ijaz Kwaja, "Dime a Day: The possibilities and Limits of Private Schooling in Pakistan," *Comparative Education Review* 52(2008): 329.

- <sup>9</sup> Pakistan: Karachi's Madrasas and Violent Extremeism, International Crisis Group, Asia Report No 130, 29 March 2007: 5.
- <sup>10</sup> Salah Uddin Shoaib Choudhury, "Madrassa: Breeding Ground of Jihadists," Modern Ghana, 30 March 2009, <a href="http://www.modernghana.com/newsp/208749/1/pagenum4/madrassa-breeding-ground-of-jihadists.html#continue">http://www.modernghana.com/newsp/208749/1/pagenum4/madrassa-breeding-ground-of-jihadists.html#continue</a> Accessed 25 March 2010.
- <sup>11</sup> Anne Cockroft, Neil Anderson, Deborah Milne, Kalid Omer, Noor Ansari, Amir Khan, and Ubaid Ullah Chaudry, "Challenging the myths about madaris in Pakistan: A national household survey of enrolment and reasons for choosing religious schools," *International Journal of Educational Development* 29 (2009): 344.
- <sup>12</sup> Singer, P.W., "Pakistan's madrassahs: Ensuring a system of education not jihad," *Brookings Institutions Analysis Papers No. 14*. Washington, DC: Brookings Institution, 2001.
- <sup>13</sup> C. Christine Fair, "Militant Recruitment in Pakistan: A New Look at the Militancy-Madrasah Connection," *Asia Policy* 4 (2007): 110.
- <sup>14</sup> Devin R. Springer, James L. Regens, David N. Edger, *Islamic Radicalism and Global Jihad*, Washington D.C.: Georgetown University Press, 2009: 140.
- <sup>15</sup> Zahid HJussain, Frontline Pakistan, New York: Colombia University Press, 2007: 83.
- <sup>16</sup> Frédéric Grare, "Islam, Militarism, and The 2007-2008 Elections in Pakistan," Carnegie Papers, The Carnegie Endowment for International Peace, No. 70, 2006.
- <sup>17</sup> Oddøjorn Lirvik, "Religion in school, interreligious relations and citizenship: the case of Pakistan," *British Journal of Religious Education* 30 (2008): 146.
- <sup>18</sup> The five networks are: the Deobandi (purtitanical originating from Darul Uloom Deoband), Barelwis (competing Sunni Muslim movement), Ahl-i-Hadith (puritanical, but closer to Wahabi or Salafi movements), Jamaat-i-Islami (Islamist party established by Abul Ala Maududi), and Shite madrassas.
- <sup>19</sup> Saleem H. Ali, *Islam and Education: Conflict and Conformity in Pakistan's Madrassahs*, Oxford, England: Oxford University Press, 2009: 154.
- <sup>20</sup> Pakistan: Karachi's Madrasas and Violent Extremeism, International Crisis Group, Asia Report No 130, 29 March 2007.
- <sup>21</sup> *Ibid*, 4.
- <sup>22</sup> One such organization, *Rabita Aalam-e-Islami*, is a known wahhabist foundation that has funded schools in Pakistan. The Al-Rashid Trust, a known radical group based in Karachi, has also funded many schools in Pakistan. "South Asia Terrorism Portal: Al-Rashid Trust," 2001.
- <a href="http://www.satp.org/satporgtp/countries/pakistan/terroristoutfits/Al-Rashid">http://www.satp.org/satporgtp/countries/pakistan/terroristoutfits/Al-Rashid</a> Trust.htm> Accessed 5 April 2010.
- <sup>23</sup> Pakistan: Karachi's Madrasas and Violent Extremeism, International Crisis Group, Asia Report No 130, 29 March 2007: 5.
- <sup>24</sup> "USAID Pakistan: Education Factsheet." 10 January 2010. < www.usaid.gov/pk> Accessed 15 April 2010).
- <sup>25</sup> "USAID Pakistan: Education Program," 3 March 2010, <a href="http://www.usaid.gov/pk/sectors/education/">http://www.usaid.gov/pk/sectors/education/</a> Accessed 5 April 2010.
   <sup>26</sup> See: "USAID Pakistan Budget and Project Funding FY 2008 and First Quarter FY 2009," 4 March 2010.
- <sup>26</sup> See: "USAID Pakistan Budget and Project Funding FY 2008 and First Quarter FY 2009," 4 March 2010 <a href="http://www.usaid.gov/pk/downloads/bud/ReportonObsandsubobsunsubobs.pdf">http://www.usaid.gov/pk/downloads/bud/ReportonObsandsubobsunsubobs.pdf</a> Accessed 5 April 2010. "PEAKS Central Asian Republics Basic Education Sector," 2010,
- <a href="http://www.aed.org/Projects/PEAKS\_CAsia.cfm">http://www.aed.org/Projects/PEAKS\_CAsia.cfm</a> Accessed 5 April 2010; "American Institutes for Research: Education, Human Development, and the Workforce," <a href="http://www.air.org/ehd/default.aspx">http://www.air.org/ehd/default.aspx</a> Accessed 5 April 2010; "Winrock International: Pakistan Projects," 2007,
- <a href="http://www.winrock.org/programs/country.asp?countryid=1318">http://www.winrock.org/programs/country.asp?countryid=1318</a> Accessed 5 April 2010.
- <sup>27</sup> Griff Witte, "Poor schooling slows anti-terrorism effort in Pakistan; Critics say the public education system is poorly funded and boosts the establishment at the expense of academics," The Washington Post, Section A:18.
- <sup>28</sup> Some examples of regional NGOs currently building schools in Pakistan include: Tameer-i-Millat, Asgharia Educational & Welfare Society, Tanzeem-e-Asatza, Pakistan Public Welfare Society, Sindh Graduate Association (SGA) Roshan Tara, The Citizen's Foundation, and Aga Khan Educational Services. See: Masooda Bano, Non-

<sup>&</sup>lt;sup>6</sup> Ghost schools are the result of fraudulent accounting practices. Government officials and local leaders siphon off funds meant for specific schools. Consequently, there are thousands of schools that exist on paper, yet do not serve a single student. Feisal Khan, "Corruption and the Decline of the State in Pakistan," *Asian Journal of Political Science* 15(2007): 224.

profit education providers vis-a'-vis the private sector: comparative analysis of non-governmental organizations and traditional voluntary organizations in Pakistan," *Compare* 38 (2008): 471 – 482. <sup>29</sup> *Ibid*, 480.

<sup>&</sup>lt;sup>30</sup> *Ibid*, 479.

<sup>&</sup>lt;sup>31</sup> Refer to endnote 28 for a list of NGOs currently establishing schools in Pakistan.

<sup>&</sup>lt;sup>32</sup> Cockroft et al.; Nila Iram, Zakir Husain, Sofia Anwar, Ijaz Hussain, and Waqar Akram, "Determinants of Child School Choice in Punjab: Policy Implications," European Journal of Scientific Research 23 (2008):285 -293.

<sup>&</sup>lt;sup>33</sup> Jacob Shapiro and C. Christine Fair, "Understanding Support for Islamist Militancy in Pakistan," *International* Security 34 (2010): 70-118.

<sup>&</sup>lt;sup>34</sup> "Religious Education Institutions (REIs): Present Situation and the Future Strategy," *Policy Perspectives* Vol 2. Institute for Policy Studies: Islamabad. < http://ips-pk.org/content/view/191/259/>

<sup>&</sup>lt;sup>35</sup> Tahir Andrabi, Jishnu Das, and Ijaz Khwaja, "A Dime a Day: The Possibilities and Limits of Private Schooling in Pakistan," Comparative Education Review 52 (2008): 351.

# A DIFFERENT FIGHT: NACRO-COMMERCIALIST INSURGENCIES IN MEXICO

#### LEVENT KIRAN

The United States and its allies increasingly confront commercialist insurgencies that seek to control territory for economic rather than traditional political reasons. These groups render the established "clear-hold-build" approach to counterinsurgency ineffective. To respond effectively to this evolving threat, U.S. officials must take into account lessons learned from previous experiences with commercialist insurgencies. This brief applies the lessons learned from the Colombian insurgency to the contemporary case of northern Mexico and argues that a fragmentation approach is required to disrupt the planning, preparation, and conduct of such groups.<sup>1</sup>

#### **FARC: The Commercialist Insurgency in Colombia**

Initially committed to the overthrow of the Colombian government, the Revolutionary Armed Forces of Colombia (FARC) evolved into a commercialist insurgency focused on controlling the Colombian countryside for the purpose of drug cultivation.<sup>2</sup> The FARC entered the drug trade in the mid-1980s with the break-up of the Medellin and Cali drug cartels. Vast profits from the drug trade allowed the FARC to expand its membership and military capability. These profits also transformed the nature of the insurgency, as the FARC's leadership seemingly became more interested in the narcotics trade than in directly challenging the Colombian government for control of the state. In the 1990s, for example, the FARC did not use its military strength to control Colombia's cities or topple the government. Instead, its major military operations focused on weakening the government's control of Colombia's coca-producing regions.<sup>3</sup> The FARC's involvement in the drug trade and growing control of Colombian territory led to a significant U.S. counterinsurgency initiative beginning in 1999, known as Plan Colombia.

#### Plan Colombia: A Clear-Hold-Build Strategy

From 1999-2006, the United States gave more than \$6.8 billion to Colombia in support of its counter-narcotics and counterinsurgency efforts. Despite the enormity of this commitment, many policymakers, politicians, and scholars have considered Plan Colombia, at best, a limited success and, at worst, in the words of Ecuadorean president Rafael Correa, a complete failure.<sup>4</sup> Plan

Colombia adhered to the clear-hold-build counterinsurgency approach that the U.S. government has traditionally advocated against revolutionary insurgencies.

## **Operational Goals**

Plan Colombia had three primary operational goals relative to the FARC:

1) *Clear Insurgents*. In order to defeat the insurgency, Plan Colombia sought to remove the FARC from the areas surrounding Bogota before clearing the rest of the countryside.

<u>Outcome</u>: The FARC remains active in the countryside and uses the region's rough terrain to avoid detection and outmaneuver the military. It controls between one fourth and one half of Colombia's territory and enjoys the support of approximately a quarter of the Colombian population.<sup>5</sup>

2) *Hold Territory and Weaken the FARC Economically*. The Colombian government sought to undermine the commercial infrastructure of the FARC through the eradication of coca plants. The United States supported these efforts with approximately \$1 billion for aerial eradication operations.<sup>6</sup>

Outcome: Seeking lucrative coca profits, farmers and traffickers thwarted aerial eradication efforts using various strategies, such as planting their coca alongside legal crops. This resulted in the continued cultivation of approximately 175,000 hectares of coca annually, which generates \$500 to \$600 million per year for the FARC.<sup>7</sup>

3) Build Public Support for the State through Alternative Economic Development. To win popular support and reduce the attractiveness of the FARC, the Colombian government sought to sever the economic connection between citizens and insurgents. The United States supported this effort by providing \$500 million to promote alternative development programs to encourage legal crop development.<sup>8</sup>

<u>Outcome</u>: The U.S. and Colombian governments were often unable to outbid the insurgents for the farmers' plots. Lack of access to land, irrigation, roads, credit, technical assistance, and established markets made it impossible for most farmers to switch to legal crops. Communities that did switch to alternative crops faced violent retribution from the FARC.<sup>9</sup>

### Fragmentation: The Success of Plan Colombia.

Despite its failure to fulfill its clear-hold-build objectives, Plan Colombia eventually reduced the FARC threat by fragmenting the insurgency's organization. This "fragmentation" decreased FARC membership, control of territory, and attacks on the government. Fragmentation consisted

of the following components: disruption of the chain of command, disruption of communication, and geographic isolation of insurgent groups. <sup>10</sup>

- 1) Disruption of the Chain of Command. The government used targeted strikes on FARC compounds to eliminate several top officials, depriving the organization of talented leaders and disrupting its ability to plan operations. The most successful of these operations occurred on March 1, 2008, when the Colombian army killed FARC Secretariat member and spokesperson Raul Reyes.<sup>11</sup>
- 2) Disruption of Communication. The Colombian military infiltrated the FARC's communication network, intercepting key intelligence on insurgent activity and disrupting insurgent communication. This ability allowed the government to free former presidential candidate Ingrid Betancourt and several other high-profile political prisoners in an elaborate deception operation.<sup>12</sup>
- 3) *Geographic Isolation*. The government isolated FARC elements through military encirclement, which reduced the FARC's mobility and disrupted interaction between different groups and fronts.<sup>13</sup>

The United States provided the following support to the fragmentation component of the Colombian military's counterinsurgency strategy:

- 1) *Training of Personnel*. The United States played a crucial role in the improvement of the Colombian military by establishing a non-commissioned officer (NCO) training academy in Colombia. Enhanced NCO training increased the combat effectiveness of the Colombian military and improved morale by mitigating class tensions between officers and soldiers.<sup>14</sup> According to SOUTHCOM Command Sgt. Major Michael Balch, the Colombian military's "previous attrition problems have been resolved through this program."<sup>15</sup>
- 2) *Equipment*. Helicopters provided by the United States gave the Colombian military the air mobility necessary to track, encircle, and isolate the FARC in Colombia's rural areas. The United States provided Colombia with enough helicopters to give Colombia the third largest Blackhawk helicopter fleet in the world.<sup>16</sup>
- 3) Signals Intelligence Technology. The Colombian military relied on U.S. technology to gain real-time intelligence on insurgent activity as FARC members typically relied on cell and satellite phones in remote areas. The sharing of U.S. SIGINT technology allowed the Colombia military to target FARC leaders and disrupt communication.<sup>17</sup>

Despite its inability to fulfill its clear-hold-build objectives, Plan Colombia seriously weakened the FARC. Colombia's experience provides several lessons that should inform future counterinsurgency efforts against commercialist insurgencies:

- A state will experience significant difficulty "clearing" a commercialist insurgency because insurgents can draw upon vast profits from the illegal drug trade to bolster their military capability, buy the support of locals, and corrupt officials.
- A state will have difficulty "holding" territory against a commercialist insurgency
  as both insurgents and civilians will actively resist the eradication of the drug
  trade to protect their financial well-being.
- A state will struggle to "build" through alternative development programs because of the significant financial incentive locals have to participate in the illegal drug trade. These drug profits make it difficult for the government to win the hearts and minds of the population.
- Targeting a commercialist insurgency's leaders and disrupting insurgent communications can "fragment" the group, disrupting its operations, isolating its members, and making it less of a threat to the state.
- Fragmentation counter-insurgency strategies are heavily dependent on a professional military, especially at the NCO rank, that is highly mobile with access to advanced signals intelligence equipment.

## **Drug Cartels: The Commercialist Insurgency in Mexico**

Mexico currently faces a commercialist insurgency in which drug cartels in northern Mexico corrupt and attack government institutions to create an ungovernable region where they face little restriction on their illicit activities. The drug cartels have evolved beyond mere organized crime networks and now constitute a significant threat to the Mexican state. They have used their vast drug profits to corrupt officials and now field a large well-equipped military force. Since 2001, 150,000 soldiers have deserted the Mexican military, nearly 1,500 of which are members of the elite Airborne Special Forces Groups (GAFES). The cartels have used offers of higher pay to lure many of these soldiers.<sup>18</sup>

Mexican cartel activity threatens to turn northern Mexico into a region resembling a failed state, with the following potential costs on the United States:

1) Increased Instability on the U.S. Border. Instability in northern Mexico will likely destabilize the U.S. southern border through increased violence and a surge of Mexican migrants. Many U.S. border states have already experienced this increased instability. Texas Department of Public Safety Director Steve McCraw recently asserted that "Spillover is here...I've been working the cartels since the 1980s and there has never been a more significant threat." Although U.S. policymakers have shied away from using this language, the recent visit of Secretary of State Hillary

Clinton, Secretary of Defense Robert Gates and Secretary of Homeland Security Janet Napolitano to Mexico suggests that the Obama administration is worried about growing instability in northern Mexico.

2) Increased Potential for Terrorist Activity. Instability in northern Mexico increases the potential for terrorist activity along the U.S. southern border. Terrorists may seek to capitalize on instability in northern Mexico in order to fund and plan operations and to smuggle individuals and equipment into the United States. Recent evidence suggests that Hezbollah has started to participate in the Latin American drug trade. <sup>20</sup> Although Mexico is not currently a significant hub for terrorist activity, instability in northern Mexico increases the potential for such activity on the U.S. border

### **Policy Options**

The Mexican government currently has three policy options available for dealing with the growing threat posed by the cartels - one civilian and two military based options.

## Civilian Option: Traditional Policing

Under this policy, Mexican law enforcement agencies, rather than the military, pre-empt and react to cartel activity. The United States would provide funds, such as the \$292 million designated for law enforcement improvements for the 2011 fiscal year, to improve the training and equipment of the police force and institute judicial reform. <sup>21</sup> Under this approach, U.S. border patrol agents would train the Mexican police in order to improve its investigative, intelligence, surveillance, and response capabilities.

#### Challenges

- The Mexican police have a long history of corruption that inhibits their ability to combat the cartels. Supervisors at both the federal and municipal levels have traditionally encouraged the rank-and-file officers to supplement their incomes through bribes. <sup>22</sup> The cartels take advantage of this organizational culture to buy police cooperation. Although the military has not been immune from corruption, it has remained more insulated from private influences. The military also heavily stresses loyalty to the central government in its soldier training programs and has an organizational culture less prone to disloyalty and corruption. <sup>23</sup> As a result, the Mexican population views the military as the less corrupt institution.
- In the near- to mid-term, the police lack the capability to challenge the cartels and provide security. The police require significant retraining and funding to transform from an inept and corrupt institution into one capable of effectively challenging the cartels. This transformation will take time, leaving the country vulnerable to the cartels unless the Mexican military steps in to fill the security vacuum.

## Military Option 1: Clear-Hold-Build

Experiences in Colombia indicate that clear-hold-build strategies will likely be ineffective against commercialist insurgencies. The financial incentives that insurgents offer to the local population hinder large-scale clearing operations and efforts to eradicate the drug trade.

- 1) Clear Insurgents. It is prohibitively costly and ineffective to provide the Mexican military with the capacity to clear the cartels.<sup>24</sup> The cartels' proximity to the population also creates the potential for heavy civilian casualties and human rights violations which would undermine the political legitimacy of the Mexican state and impose political costs on the United States
  - The United States supported Colombia's use of large-scale military operations against the FARC under Plan Patriota in 2003. Although these operations led to significant FARC casualties, they did not clear the FARC. Analysts have since criticized the operations, claiming that it was not the killing of common soldiers, which the insurgents could easily replace, but the assassination of FARC leaders that weakened the insurgency<sup>25</sup>
- 2) Hold Territory and Weaken the Cartels Economically. Military operations are unlikely to undermine the financial incentive for the cartels to engage in the drug trade because of the high demand in the United States.
  - During his tenure, President Calderon has been unable to significantly reduce the overall volume or value of the drug trade, despite intensified Mexican efforts to eradicate marijuana crops, dismantle methamphetamine laboratories and interdict cocaine shipments.<sup>26</sup> The United States has experienced similar difficulties, only intercepting 5 to 15 percent of drug shipments into the country despite spending \$40 billion per year on interdiction efforts.<sup>27</sup>
- 3) Build Public Support for the State through Alternative Economic Development. The Mexican government is unlikely to find an alternative economic activity for the 450,000 people employed by the cartels.<sup>28</sup> The economic factors that inhibited alternative economic development initiatives in Colombia will be compounded in Mexico because the Mexican drug industry is centered on the trafficking rather than the growing of coca. Drug-related jobs are not limited to the agricultural sector and cannot be replaced through simple crop substitution. The Mexican cartels also provide lucrative jobs to hit-men, drivers, accountants, and money launderers.<sup>29</sup>

### Military Option 2: Fragmentation

Experiences in Colombia indicate that the Mexican government can weaken the cartels through a fragmentation counterinsurgency strategy, which focuses on disrupting the cartels' command and control of their organizations. Like Colombia in 1999, Mexico also faces challenges in

personnel, equipment, and intelligence that currently limit its ability to implement a fragmentation strategy. To execute a fragmentation strategy, Mexico needs to:

- 1) Disrupt Cartel Chain of Command. The Mexican government must continue to prioritize the arrest of cartel leaders and important officials. Arrests deprive the cartels of experienced decision makers, leaving them vulnerable to government counterinsurgency efforts. To successfully eliminate cartel leaders, the Mexican government needs a skilled and professional military capable of capturing cartel leaders, while not being corrupted by the cartels.
- 2) Disrupt Cartel Communication Networks. The Mexican government must infiltrate cartel communication systems to efficiently target leaders and disrupt insurgent operations. The Mexican government will need improved signals intelligence technology to break cartel communications, which according to one captured Gulf Cartel member, depend on complex, encrypted radio networks stretching from the U.S. border to Guatemala. 30
- 3) *Isolate Cartels*. Geographic isolation will disrupt the cartels' networks by impeding communication and coordination operations. The government must have a significant presence in the major population centers to complicate cartel operations and should establish checkpoints along major roads to inspect cargo and monitor cartel movement.

The United States should assist Mexico in implementing its fragmentation strategy by:

- 1) Bolstering Mexico's Officer Training and Screening Process. The United States should help professionalize the Mexican military through increased NCO training and monitoring. NCOs traditionally have not played a major role in the Mexican military, adding to class tensions. U.S.-sponsored NCO training programs would ease class tensions by providing a professional and well-paid career path for young enlisted soldiers. A professional NCO corps also would improve unit cohesion and combat effectiveness. U.S.-sponsored programs that help the government monitor the activities of the military would aid in identifying disloyalty and corruption within the ranks.
- 2) *Providing Additional Equipment*. The United States should continue to provide funding for the non-intrusive inspection equipment, such as ion scanners, gamma ray scanners and X-ray vans, which will allow the Mexican government to identify cartel activity in its cities. The United States also must increase the number of helicopters provided to Mexico, as air mobility is essential for the government to combat and isolate insurgents in rural areas. The United States has only delivered 5 helicopters to Mexico as of December 2009 compared to the nearly 200 helicopters provided to Colombia.<sup>32</sup>

3) Continuing Recent Commitment to Intelligence Sharing. The United States should continue to share classified signals intelligence and computer technology with Mexico so that the Mexican military can disrupt cartel communication networks and obtain the intelligence necessary to target leaders.

Fragmentation will not eliminate the drug cartels or destroy the drug trade. The United States and Mexico need to invest heavily in Mexico's law enforcement and judicial systems in order solve the drug cartel problem in the long-term. These investments, however, will not help Mexico until the cartels are significantly weakened. Experience in Colombia has shown that a fragmentation counterinsurgency strategy will weaken the insurgents' power by disrupting the command, control, and communications. The United States should provide Mexico with the officer training, equipment, and intelligence necessary to fragment the cartels so that the Mexican government can succeed in the first phase of its struggle against the cartels.

<sup>&</sup>lt;sup>1</sup> For a more detailed discussion on commercialist insurgency, see Metz, Steven. "The Future of Insurgency." *Strategic Studies Institute.* December 1, 1993.

<sup>&</sup>lt;sup>2</sup> Felbab-Brown, Vanda. *Shooting Up: Counterinsurgency and the War on Drugs*. Washington, DC: The Brookings Institution, 2010. 99. Brittain, James J. *Revolutionary Social Change in Colombia: The Origin and Direction of the FARC-EP*. New York: Pluto Press, 2010. 152.

<sup>&</sup>lt;sup>3</sup> Brittain 221.

<sup>&</sup>lt;sup>4</sup> Brittain 224. The United States Government Accountability Office (GAO), "Plan Colombia: Drug Reduction Goals Were Not Fully Met, but Security Has Improved; U.S. Agencies Need More Detailed Plans For Reducing Assistance." October, 2008.

<sup>&</sup>lt;sup>5</sup> Isacson, Adam. "Lessons from America's Other Counterinsurgency." *Foreign Policy*. December 16, 2009.

<sup>&</sup>lt;sup>6</sup>U.S. GAO report 35.

<sup>&</sup>lt;sup>7</sup> Hanson, Stephanie. "FARC, ELN, Colombia's Left-Wing Guerrillas." *Council on Foreign Relations*. August 19, 2009. Romero, Simon. "Cocaine Sustains War in Rural Colombia." *New York Times*. July 27, 2008.

<sup>&</sup>lt;sup>8</sup>U.S. GAO report 53.

<sup>&</sup>lt;sup>9</sup> Ouoted Felbab-Brown 103.

<sup>&</sup>lt;sup>10</sup> For a more detailed discussion on fragmentation, see Byman, Daniel. "Do Targeted Killings Work?" *Foreign Affairs*. 2006. While this brief does not argue for targeted killings per se, it borrows from the article the strategy of disrupting an organization through the elimination of leadership and disruption of communications.

<sup>&</sup>lt;sup>11</sup> Deshazo, Peter, Johanna Mendelson Forman and Phillip McLean. "Countering Threats to Security and Stability in a Failing State." *Center for Strategic and International Studies*. September, 2009. 25.

<sup>&</sup>lt;sup>12</sup> Deshazo xiv.

<sup>&</sup>lt;sup>13</sup> Felbab-Brown 106.

<sup>&</sup>lt;sup>14</sup> Deshazo 68.

<sup>&</sup>lt;sup>15</sup> "U.S. Soldiers Help Colombia Transform its Enlisted Ranks." *United States Southern Command News*, July 2, 2008.

<sup>&</sup>lt;sup>16</sup> Deshazo 22.

<sup>&</sup>lt;sup>17</sup> Deshazo 48. Felbab-Brown 107.

<sup>&</sup>lt;sup>18</sup> Grayson, George W. *Mexico: Narco-Violence and a Failed State*. New Brunswick, NJ: Transaction Publishers, 2010, 157

<sup>&</sup>lt;sup>19</sup> Roebuck, Jeremy. "DPS Director: Spillover is Here." *The Monitor*. March 30, 2010.

<sup>&</sup>lt;sup>20</sup> "House Foreign Affairs Subcommittee on Western Hemisphere Hearing; Assessing U.S. Drug Policy in the Americas; Testimony by Ray Walser, Senior Policy Analyst for Latin America, Douglas and Sarah Allison Center for Foreign Policy Studies, The Heritage Foundation." October 15, 2009.

<sup>&</sup>lt;sup>21</sup> Johnson, David T. "FY 2011 Budget Request for Security Assistance Programs." *U.S. Department of State*. April 14, 2010.

<sup>&</sup>lt;sup>22</sup> Lacey, Mark. "In an Escalating Drug War, Mexico Fights the Cartels, and Itself." *New York Times*. March 30, 2009.

<sup>&</sup>lt;sup>23</sup> Diez, Jordi and Ian Nicholls. "Mexican Armed Forces in Transition." January, 2006.

<sup>&</sup>lt;sup>24</sup> Grayson 185. The cartels' arsenal includes AR-15 and AK-47 assault rifles, MP5 submachine guns, 50mm machine guns, grenade launchers, ground-to-air missiles, dynamite, bazookas and helicopters.

<sup>&</sup>lt;sup>25</sup> Isacson, Adam, "Where the FARC are being beaten-and where they aren't." *Center for International Policy*. May 28, 2008.

<sup>&</sup>lt;sup>26</sup>Hanson, Stephanie. "Mexico's Drug War" *Council on Foreign Relations*. November, 20, 2008. Brands, Hal." Mexico's Narco-Insurgency and U.S. Counterdrug Policy." *Strategic Studies Institute*. May, 2009.

<sup>&</sup>lt;sup>27</sup> Grayson 261.

<sup>&</sup>lt;sup>28</sup> Grayson 254.

<sup>&</sup>lt;sup>29</sup> Lacey, Mark. "In an Escalating Drug War, Mexico Fights the Cartels, and Itself." *New York Times*. March 30, 2009.

<sup>&</sup>lt;sup>30</sup> Schiller, Dane and Susan Carroll. "Former Gulf Cartel insider spills his high-tech secrets." *Houston Chronicle*. August 25, 2009.

<sup>&</sup>lt;sup>31</sup> Applegate, Rex. "Time Bomb on the U.S. Border: Mexican Military Unable to Counter Insurgency." 1995.

<sup>&</sup>lt;sup>32</sup>The United States Government Accountability Office (GAO), "Status of Funds for the Merida Initiative." December 3, 2009. Deshazo 22.

#### AFGHANISTAN AND THE SEARCH FOR A SUSTAINABLE ECONOMY

#### MEGAN LIABOE

For almost a decade, the United States and much of the industrialized world has committed its wealth and power to establish a secure Afghanistan; yet, in spite of these efforts, the Afghan government remains heavily dependent on the international community and foreign aid. In order to secure a strong central government independent of international assistance, Afghanistan must develop a stable source of domestic revenue to cover its expenditures. Absent this sustainable revenue stream, the Afghan government will remain dependent on the international community and, should foreign assistance decline, risk devolving into a failed state. This paper argues that the most effective means for the Afghan government to generate sufficient domestic revenue is to tax countries and corporations seeking access to Afghanistan's vast mineral deposits, including copper, iron ore, gold, and uranium.

## The U.S. and International Community's Strategic Goals in Afghanistan

The United States and the international community share a number of objectives pertaining to Afghanistan's future. These objectives include:

- Strengthening the Afghan central government,
- Preventing Afghanistan from becoming a safe haven for radical Islamist groups, and
- Preventing Afghanistan from becoming a major source of narcotic production and exportation, especially opium and hashish.

Accomplishing these objectives would create a relatively stable and secure state in a highly volatile region of the world. These goals, however, require an exhaustive and expensive buildup of the Afghan state, which at present, is largely subsidized by the international community. For a strong central government to exist in Afghanistan, a stable source of domestic revenue must be found so that the government has the resources necessary to extend and maintain its control over the countryside.

#### The Afghan Government's Reliance on International Aid

Afghanistan is almost entirely dependent on foreign aid, with approximately 90% of the national budget financed externally.<sup>1</sup>

- Government Unable to Meet Administrative Costs: The Afghan government needs to increase its tax revenue by at least 50% to cover its administrative costs. According to the IMF, the Afghan government's expenses in 2007 were approximately \$1.3 billion, while its tax revenue was only \$525.6 million.<sup>2</sup>
- Government Unable to Meet Security Costs: Currently, the United States and international community provide the bulk of the funding for the Afghan National Army (ANA) and the Afghan National Police (ANP). In 2008 the U.S. Government Accountability Office (GAO) estimated that sustaining the Afghan National Security Forces (ANSF) would cost \$2 billion annually.<sup>3</sup> The U.S. military, however, estimates that the ANSF needs to almost triple in size to effectively fight the Taliban insurgency.<sup>4</sup> With this expansion, the cost of sustaining the ANA will rise to approximately \$3 billion per year, while funding the ANP will cost approximately \$1 billion.<sup>5</sup>

When accounting for both administrative and security functions, the Afghan government will need to increase its revenue by approximately \$4.25 billion per year in order to achieve financial independence.

## The Danger of Afghan Reliance on International Aid

The primary concern with Afghanistan's foreign aid dependence is that the international aid will eventually dry up, and Afghanistan will be unprepared to compensate for the loss of international support.

- The international community will eventually succumb to "aid fatigue" and stop providing Afghanistan with aid.
  - The international community pledged \$39 billion from 2002 to 2011, but only approximately 40% has been disbursed.<sup>6</sup>
  - "The Donor Financial Review for 2008" finds that the international donor community is only fulfilling 48% of Afghanistan's estimated needs.<sup>7</sup>
  - Development aid generally falls by 30 to 40% during recessions.<sup>8</sup>
  - In 2009, the UN threatened to turn to Bill Gates for financial assistance due to the slow disbursement of development aid to Afghanistan. Kai Eide, the UN's special representative for Afghanistan, also stated that agriculture and infrastructure remained "dangerously underfunded."
- A sudden stop of foreign aid to an unprepared Afghanistan will likely result in a severe weakening and possible failure of the Afghan state.
  - Defense Secretary Robert Gates said in 2007 that "military success is not sufficient to win" in Afghanistan, and that "there is a need for a dramatic increase in spending on the civilian instruments of national security [...] foreign assistance, civic action, economic reconstruction, and development." <sup>10</sup>

#### **Historic Sources of Government Revenue**

Historically, Afghanistan has been plagued by consistently low levels of government revenue, despite a variety of sources. Minimal revenue is one factor that has prevented the emergence of a strong central government.<sup>11</sup>

- Income Taxes and Afghanistan's Limited Tax Base
  - o The established tax system depends on a monetized tax base but most Afghans survive on subsistence agriculture and remain outside the tax collector's reach. 12
  - Extreme remoteness of villages, rugged terrain, and scarcity of all-weather roads also severely inhibit centralized tax collection.
  - o Large rural landowners historically used bribes and their connections to avoid government taxation. <sup>13</sup>

### • Taxing Trade

- o Taxes on foreign trade were the Afghan government's major tax base in 1970s. 14
- Natural Gas
  - In the late 1970s, Afghanistan supplied 70 to 90% of its natural gas output to the Soviet Union through Uzbekistan.<sup>15</sup>
  - At that time, annual natural gas exports totaled approximately \$150 million.
  - Natural gas exports constituted 44% of all government revenue in 1982. 16
  - The Soviet Union ended the import of natural gas from Afghanistan after it withdrew from the country in 1989. 17
- Raisin Cultivation and Exports
  - Due to its hot, arid climate during the months of August and September, Afghanistan is an ideal location for producing high quality raisins.
  - In the 1960s and 1970s, raisins from Afghanistan accounted for 60% of the world market and their annual export revenue totaled \$48 million. 18

### **Economic Options for a Self-Reliant Afghan Government**

To achieve independence from international aid, the government must raise \$6 billion annually. Currently, the Afghan government currently faces a shortfall of \$3.25 billion, which will increase to approximately \$4.25 billion with the expansion of the Afghan National Security Forces (ANSF) and the expansion of the government's administrative capability throughout Afghanistan. Presented in this paper are four options for bridging the financial gap by utilizing Afghanistan's domestic resources: oil and gas production, taxing transportation routes, expanding fruit exports, and mining.

#### Current Potential Sources of Income:

(1) <u>Oil and Gas Pipelines</u>: Building a pipeline from Turkmenistan through Afghanistan to Pakistan and India (TAPI) could generate an estimated \$200 million a year in transit fees for the Afghan government. Such a pipeline may connect to the Pakistani port of Gwador, which China is helping to develop. Currently, only one operational pipeline exists that transports natural gas 80 miles from the Sheberghan gas fields in northern Afghanistan to a partially operational power plant near Mazar-i-Sharif. 10

## Challenges:

- Building a gas pipeline through Afghanistan involves significant economic costs because of difficult terrain and risk due to an uncertain security environment.
- The TAPI pipeline would not tap into Afghan natural gas reserves; it would only transport Turkmenistan's natural gas.
- Turkmenistan has committed to four export routes: north to Russia, east to China, south to Pakistan, and west to Europe. Routes to Russia and China are more lucrative with less risk and, therefore, take higher priority over a route through Afghanistan.<sup>21</sup>
- (2) <u>Transportation Routes</u>: The government could tax trade transiting the "Ring Road," which encircles approximately 80% of the Afghan interior. Former Finance Minister Ashraf Ghani estimated in the spring of 2005 that income from a transit tax could net the Afghan government \$200 million a year.<sup>22</sup>

#### Challenges:

- The benefit of taxing commercial traffic would be limited because revenue from transit fees would be offset by the cost of maintaining the road.
- As maintenance of the "Ring Road" is expected to cost Afghan government \$200 million annually, estimated transit fees of \$200 million a year would only serve to offset the maintenance cost, and would not garner surplus government revenue.<sup>23</sup>
- (3) <u>Reinvigorating Afghanistan's Fruit and Agricultural Production</u>: Forty years ago, Afghanistan was renowned for its fruit exports, especially its pomegranates, apricots, and raisins. Since the 1970s, the country's fruit industry has plunged into chaos; however, as the country's security and transportation continues to improve, there is hope for a resurgence of these crops. In 2007, Afghanistan produced almost 4 million metric tons of wheat, 95,000 metric tons of watermelons, 350,000 metric tons of grapes, and 38,000 metric tons of apricots. This production amounted to \$165 million in exports of fresh and dried fruits.<sup>24</sup>

Exports could prove to be a vital revenue source for the Afghan government as 8% of the government's 2007 total revenue came from taxes on international trade. The government's revenue from international trade taxes is equal to the sum of its revenue from taxes on income, profits, capital gains, goods, and services. A modest tax on fruit and agricultural exports could provide a sustainable revenue source for the Afghan government. However, it is doubtful that the revenue garnered from agricultural exports alone would be significant enough to fill the major financial gap in the Afghan budget.

#### Challenges:

- It is extremely difficult to tax farmers, most of whom survive on subsistence agriculture. Furthermore, the remoteness of villages, difficult terrain, and lack of dependable transportation routes would seriously impede tax collection.<sup>26</sup>
- Due to the Afghan government's "hands off" approach to the fruit industry, the lack of cold-storage infrastructure, and the country's broken irrigation system, agricultural exports remain a fragile market and most agricultural exports need to be protected from taxes for the near future.<sup>27</sup>
- In 2009, Pakistan imposed a 4% import tax and a 14% sales tax on Afghan vegetables and fruit, significantly decreasing Afghan exports to Pakistan. <sup>28</sup>
- In 2005, the Afghan government agreed in principle to exempt fruit exports from taxes in order to boost exports, but the exemption was largely ignored.<sup>29</sup>
- As the U.S. government focuses on substituting poppy fields with alternative crops like wheat, saffron, or pomegranates, it is imperative that these alternative crops produce greater revenue for Afghan farmers than opium. 

  \*\*Export taxes on agricultural goods would diminish farmer's profits on alternative crops, encouraging farmers to return to opium production.\*\*
- (4) <u>Mining</u>: Mining is the only industry with the potential to subsidize a large portion of the Afghan government's revenue needs. There are over 300 types of mineral deposits in Afghanistan, including coal, copper, marble, emeralds, and blue lapis lazuli stone.<sup>31</sup> In 2007, the Chinese paid the Afghan government \$3 billion for exclusive mining rights to the Aynak copper mine.<sup>32</sup> The government may accrue additional annual tax revenue estimated between \$300 million and \$730 million during mine construction. Some estimate that annual tax revenue could reach \$955 million when the mine is at full production.<sup>33</sup>

There are many mineral deposits that the Afghan government can make available to development bids. These mines could bring in not only revenue for the government, but also jobs for its people.

#### • Hajigak Iron Mine

- o The Afghan government recently opened up the Hajigak iron mine for development bids. It is estimated that 60 billion tons of ore are buried beneath the surface and lies approximately 60 miles west of Kabul in the Bamyan province.<sup>34</sup>
- o According to Afghan Minister of Mines Wahidullah Shahrani, Hajigak is expected to generate substantially more revenue than the Aynak copper mine.<sup>35</sup>
- With China, India, and Russia all expressing interest in acquiring rights to the mine, Afghanistan is in a strong negotiating position to secure a lucrative deal.<sup>36</sup>

#### • Gold

- Gold deposits in Badakshan province are significant enough to provide a source of local industry and employment.
- The precious metal could be easily exported utilizing the forthcoming railroad north into Tajikistan.<sup>37</sup>

#### Uranium

- There is a uranium deposit located in Helmand province, which could prove to be extremely profitable should the security situation improve. <sup>38</sup>
- O Uranium is desired in many countries, and could be transported to Kandahar using the Ring Road. From there, it could either be shipped out of the provincial capital's airport, or continue south to the Pakistani border to Spin Boldak and Chaman to connect to the Pakistani railroad system.

#### • Marble

- Some experts estimate that billions of metric tons of marble exist untouched throughout Afghanistan.<sup>39</sup>
- o In Herat Province, Chest-e-Sharif district, the Chest-e-Sharif marble mines produce marble of global quality.
- o In 2009, U.S. entrepreneurs explored investing in Afghan marble mines.
- The deal included all-weather improvement to a 120km stretch of Highway 2; this part of the road network links Herat to Kabul without going around the Ring Road and saves 3-4 days of travel.<sup>40</sup>

The mining industry offers the Afghan government the possibility of a stable, long-term, and lucrative source of revenue. For example, the Aynak copper mine alone has the potential to cover almost 25% of the government's current financial gap. The Hajigak mine is expected to generate even more revenue, despite iron ore's current low price. Precious metals, like gold and uranium, have the potential of generating significant revenue. With smart negotiations and contracts, the Afghan government has the opportunity to secure financial independence and generate the needed revenue to extend its influence throughout the countryside.

http://siteresources.worldbank.org/INTAFGHANISTAN/Resources/Afghanistan-Reconstructional-Trust-Fund/Public-Expenditure-Review\_Summary.pdf, pg. 1.

http://media.washingtonpost.com/wp-srv/politics/documents/Assessment\_Redacted\_092109.pdf?.

http://www.eoearth.org/article/Energy\_profile\_of\_Afghanistan.

<sup>&</sup>lt;sup>1</sup> "Background Paper: Afghanistan Reconstruction Trust Fund." Promoting Generation of Public Expenditure Reforms. The World Bank, London, UK, January 29, 2010.

<sup>&</sup>lt;sup>2</sup> International Monetary Fund. Government Finance Statistics Yearbook 2008. Pg 38.

<sup>&</sup>lt;sup>3</sup> United States Government Accountability Office Report to Congressional Committees. "Afghanistan Security: Further Congressional Action May Be Needed to Ensure Completion of a Detailed Plan to Develop and Sustain Capable Afghan National Security Forces." June 2008. Pg 3. http://www.gao.gov/new.items/d08661.pdf.

<sup>&</sup>lt;sup>4</sup> McChrystal, Stanley A. "Commander's Initial Assessment." August 30, 2009.

<sup>&</sup>lt;sup>5</sup> "Factbox: Afghan National Security Forces." March 27, 2009. http://www.reuters.com/article/idUSISL112818.

<sup>&</sup>lt;sup>6</sup> Waldman, Matt. "Falling Short: Aid Effectiveness in Afghanistan." ACBAR Advocacy Series. March 2008. http://www.acbar.org/ACBAR%20Publications/ACBAR%20Aid%20Effectiveness%20(25%20Mar%2008).pdf.

<sup>&</sup>lt;sup>7</sup> Ashdown, Paddy and Joseph Ingram. "Falling Short on Afghanistan." *New York Times*. April 29, 2009. http://www.nytimes.com/2009/04/30/opinion/30iht-edashdown.html?\_r=1&ref=global.

<sup>&</sup>lt;sup>8</sup> Tolentino, V. Bruce J. "Foreign Aid & the Global Economic Crisis." April 1, 2009. http://asiafoundation.org/in-asia/2009/04/01/foreign-aid-the-global-economic-crisis/.

<sup>&</sup>lt;sup>9</sup> Deen, Thalif. "U.N. Decries Aid Shortfall in Afghanistan." *Inter Press Service News Agency*. June 30, 2009. http://ipsnews.net/news.asp?idnews=47477.

<sup>&</sup>lt;sup>10</sup> Gates, Robert M. "Landon Lecture (Kansas State University)." November 26, 2007. http://www.defense.gov/speeches/speech.aspx?speechid=1199.

Afghan government revenue only grew by 26% between 1939 and 1972. Nyrop, Richard F. and Donald M. Seekins. *Afghanistan Country Study*. (Washington, D.C.: American University Press, 1986): pg 155-157.

<sup>&</sup>lt;sup>12</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Clough, Langdon D. "Energy Profile of Afghanistan." January 21, 2007.

<sup>&</sup>lt;sup>16</sup> Nyrop, Richard F. and Donald M. Seekins. *Afghanistan Country Study*. (Washington, D.C.: American University Press, 1986): pg 155-157. http://www.gl.iit.edu/govdocs/afghanistan/Afghanistan-Chapter3.pdf. <sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Synovitz, Ron. "Afghanistan: China's Winning Bid for Copper Rights Includes Power Plant, Railroad." *Radio Free Europe Radio Liberty*. November 24, 2007. http://www.rferl.org/content/article/1079190.html.

<sup>&</sup>lt;sup>19</sup> Riphenburg, Carol J. "Afghanistan: Out of the Globalisation Mainstream?" *Third World Quarterly*, Vol. 27:3 (2006): pg 519.

<sup>&</sup>lt;sup>20</sup> Clough, Langdon D. "Energy Profile of Afghanistan." January 21, 2007.

http://www.eoearth.org/article/Energy profile of Afghanistan.

<sup>&</sup>lt;sup>21</sup> Foster, John. "Afghanistan, the TAPI Pipeline, and Energy Geopolitics." *Journal of Energy Security*. March 23, 2010. http://www.ensec.org/index.php?option=com\_content&view=article&id=233:afghanistan-the-tapi-pipeline-and-energy-geopolitics&catid=103:energysecurityissuecontent&Itemid=358.

<sup>&</sup>lt;sup>22</sup> Danspeckgruber, Wolfgang and Robert P. Finn. "The Afghan Economy." *Building State and Security in Afghanistan*. Ed. Wolfgang Danspeckgruber with Robert P. Finn. (Princeton, NJ: Woodrow Wilson School of Public and International Affairs, 2007) pg 133.

<sup>&</sup>lt;sup>23</sup> Nasuti, Matthew. "The Ring Road: A Gift Afghanistan Cannot Afford." *Kabul Press*. September 29, 2009. http://kabulpress.org/my/spip.php?article4093; McCarten, William and Javier Suarez. "Trade and Regional Cooperation between Afghanistan and its Neighbors." February 18, 2004. pg. 38.

<sup>&</sup>lt;sup>24</sup> The Europe World Year Book 2009. 50<sup>th</sup> Edition, Volume 1. Routledge: New York, 2009. Pg 507-508.

<sup>&</sup>lt;sup>25</sup> World Bank. World Development Indicators 2009. April 2009. Pg 248.

<sup>&</sup>lt;sup>26</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> Zonn, I.S. "Water Resources of Northern Afghanistan and their Future Use." Presented at Informal Planning Meeting: Water, Climate, and Development Issues in the Amudarya Basin, Philadelphia. June 18-19, 2002. Pg 5. http://www.ccb.ucar.edu/wkshp/centralasia/docs/zonn.pdf.

<sup>&</sup>lt;sup>28</sup> "Afghanistan Food Security Update." USAID. September 2009. http://fews.net/docs/Publications/Afghanistan FSU 2009 09 final.pdf.

<sup>30</sup> Donadio, Rachel. "New Course for Antidrug Efforts in Afghanistan." The New York Times. June 27, 2009. http://www.nytimes.com/2009/06/28/world/asia/28holbrooke.html; Khalaj, Monavar. "Iran fights for its saffron status." Financial Times. March 24, 2010. http://www.ft.com/cms/s/0/d8fe5456-3765-11df-9176-00144feabdc0.html.

<sup>31</sup> Riphenburg, Carol J. "Afghanistan: Out of the Globalisation Mainstream?" Third World Quarterly, Vol. 27:3

(2006): pg 519.

32 Landay, Johnathan S. "China's thirst for copper could hold key to Afghanistan's future." McClatchy Newspapers. March 9, 2009. http://www.mcclatchydc.com/2009/03/08/63452/chinas-thirst-for-copper-could.html.

<sup>33</sup> McMahon, Gary. "No More Enclaves: Aynak in Afghanistan." US Institute of Peace. February 10, 2010. http://www.usip.org/files/McMahon%20USIP%20presentation%20Aynak.pdf.

<sup>34</sup> Landay, Johnathan S. "China's thirst for copper could hold key to Afghanistan's future." McClatchy Newspapers. March 9, 2009. http://www.mcclatchydc.com/2009/03/08/63452/chinas-thirst-for-copper-could.html.

35 "PDAC-Afghanistan looks to attract foreign mining companies." Reuters. March 10, 2010. http://www.chinamining.org/News/2010-03-10/1268200404d34469.html.

<sup>36</sup> Landay, Johnathan S. "China's thirst for copper could hold key to Afghanistan's future." McClatchy Newspapers. March 9, 2009. http://www.mcclatchydc.com/2009/03/08/63452/chinas-thirst-for-copper-could.html; Nematova, Anna and Owen Matthews. "Russia Invades Afghanistan—Again." Newsweek. April 3, 2010. http://www.newsweek.com/id/235886.

<sup>37</sup> "Preliminary Assessment of Non-Fuel Mineral Resources of Afghanistan, 2007." US Geological Survey. October 2007. http://pubs.usgs.gov/fs/2007/3063/fs2007-3063.pdf.

<sup>38</sup> Danspeckgruber, Wolfgang and Robert P. Finn. "The Afghan Economy" in *Building State and Security in* Afghanistan. Princeton, NJ: 2007, 137.

Motevalli, Golnar. "Afghanistan sees great white hope in marble sector." Reuters. April 20, 2010. http://www.reuters.com/article/idUSTRE63K00C20100421.

<sup>40</sup>Conversation with Colonel John Bessler, Director of Security, Reconstruction, and Transition. U.S. Army Peacekeeping and Stability Operations Institute. April 9, 2010.

<sup>&</sup>lt;sup>29</sup> Mohammadi, Zainab. "Fruit exports may be exempted from taxes." *Asia Pulse*. June 16, 2005. http://www.mof.gov.af/english/press-review-june-10-16.htm#a11: "Case Study of Poultry and Grape/Raisin Subsectors in Afghanistan: Guided Case Studies in Value Chain Development for Conflict-Affected Environments." USAID microReport #106. March 2008. http://pdf.usaid.gov/pdf\_docs/PNADN388.pdf\_

## AMERICA AND THE ARTIC SUPERHIGHWAY: DEVELOPING ECONOMIC OPPORTUNISM IN A WARMING ARTIC

#### KRISTOPHER MCCLELLAN

Climate change and shrinking sea ice in the Arctic create new opportunities for cheaper commercial shipping and increased access to new oil reserves and other resources. Russia and Canada already exploit new oil and shipping prospects in the High North. The United States can also benefit from these emerging opportunities by creating an "Arctic Superhighway" for safe and predictable commercial shipping and energy transportation. This "Superhighway" would form the cornerstone of U.S. strategy in an ice-free Arctic by overcoming current obstacles like long range communications, limited disaster response capability, unresolved territorial disputes, and unregulated resource extraction practices.

## **Arctic Climate Change and Economic Opportunities**

Global climate change in the Arctic reduces sea ice thickness and extent, raising questions about potential resource extraction opportunities and new viable shipping routes. Natural gas and oil extraction and new sea routes may lead to competition over sovereignty and use of resources.

## Reduced Sea Ice

Arctic warming reduces both the thickness and extent of sea ice. Sea ice coverage decreased 40 percent since 1979, and research suggests an ice-free Arctic summer as early as 2040. Warmer waters result in more annual melting, reducing thick multiyear ice that poses the greatest danger to vessels. Thinner young ice will allow commercial shipping to navigate previously inaccessible routes. <sup>2</sup>

## **Economic Opportunities**

A warmer Arctic will allow access to faster, cheaper shipping lanes, and new oil and natural gas reserves.

1. *Reduced travel times and costs*: Arctic routes between Asia and Europe would decrease transit times by more than a third compared to the Suez or Panama canals.<sup>3</sup> For example,

using Arctic shipping routes from China to New York would save 3,000 miles and over \$2 million in fuel and fees (USD).<sup>4</sup>

- 2. Access to new oil reserves: The Arctic may contain up to 22 percent of the world's undiscovered oil reserves.<sup>5</sup> Already, more than 400 oil and gas fields have been discovered in the Arctic, and that number is expected to rise.<sup>6</sup> The North American Arctic is expected to hold 65 percent of undiscovered oil, with the largest reserves in Arctic Alaska.<sup>7</sup>
- 3. Access to new natural gas reserves: The Arctic is believed to contain 30 percent of the world's undiscovered natural gas reserves. The Arctic holds an estimated 1,670 trillion cubic feet of natural gas and 44 billion barrels of natural gas liquids (NGL). 9

Around 74 percent of natural gas is on the Eurasian side of the Arctic.<sup>10</sup> The West Siberian Basin, East Barents Basin, and Arctic Alaska are estimated to contain the vast majority of accessible natural gas and NGL reserves. Russia is expanding operations in Western Siberia to access the largest predicted Arctic reserves.<sup>11</sup>

### **Developing the Arctic Superhighway**

The Arctic Superhighway refers to the new Arctic shipping routes that would reduce transit times for intercontinental commercial shipping and facilitate the export of Arctic fossil fuels to meet global energy demands. This highway will be founded on a network of multilateral and bilateral agreements among Arctic states. The same frameworks supporting this superhighway will also enable the development of resource extraction by providing access to drilling sites and establishing legal rights and responsibilities for Arctic operators.

The Superhighway supports the responsible development of Arctic resources and the expansion of Arctic shipping by providing the following core elements:

- Long range communications and navigation infrastructure for commercial vessels, including detailed mapping, and weather reporting;
- Search and rescue and disaster response capacity using both sea and air assets to assist stranded vessels and contain the effects of an oil spill or other environmental disaster:
- Comprehensive, mandatory standards for shipping and resource extraction that protect human lives and the environment; and
- Peaceful territorial dispute resolution among affected parties to establish definitive rights and responsibilities over valuable Arctic assets.

#### **Current Obstacles**

Legal, political, and technological obstacles currently stand in the way of an effective Arctic Superhighway:

#### 1. Legal obstacles:

The United States is not a party to UNCLOS and current shipping and environmental standards are too weak to protect lives and the environment in the Arctic.

- Limited rights to the continental shelf: The United States does not enjoy the full protections and privileges afforded to coastal states because it is not a party to the UN Convention on the Law of the Sea (UNCLOS). Unless it joins UNCLOS, the United States cannot submit claims on its extended continental shelf to the Commission on the Limits of the Continental Shelf established in Annex II of UNCLOS<sup>12</sup> or assert its "exclusive right to authorize and regulate drilling on the continental shelf for all purposes." This limits U.S. resource claims to its Exclusive Economic Zone.
- *Non-binding environmental and shipping regulations*: The most comprehensive set of regulations for Arctic shipping operations is the International Maritime Organization's "Guidelines for Ships Operating in Arctic Ice-Covered Waters," which focus on mitigating the risks of pollution, protecting human lives, and ensuring safe navigation through appropriate equipment and communications capabilities. The Arctic Council's "Offshore Oil and Gas Guidelines" are also fairly comprehensive and detailed, explaining environmental impact assessment and monitoring standards as well as safety procedures and operating practices to protect infrastructure and workers. Despite their extensive content, both of these guidelines are merely recommendations and do little to protect human lives or the environment in the Arctic.

## 2. Political obstacles:

The Arctic Council is ineffective and territorial disputes disrupt development.

- The Arctic Council is unable to provide effective regulation and monitoring: The Arctic Council is an eight-member intergovernmental organization "for promoting cooperation, coordination, and interaction among the Arctic States." The Arctic Council recently called for national and international regulations to ensure the safety of Arctic shipping, cooperation for disaster response, and the extension of the "precautionary" and "polluter pays" principles to the Arctic. 17 Because the Council operates on consensus, however, it has been unable to

produce binding and effective regulations for Arctic shipping and resource extraction.

- Unresolved territorial disputes: The United States has outstanding territorial disputes over known areas with even its closest Arctic partner, Canada. For example, the United States and Canada have awarded oil exploration and fishing rights within a 21,436 square kilometer area of the Beaufort Sea, but have both prohibited any work in the disputed zone until the border is resolved. The United States and Canada also contest the status of the Northwest Passage (NWP) near Canada, preventing shipping companies from determining applicable law for ships transiting the NWP. 19

## 3. Technological obstacles:

The United States lacks effective disaster response capability.

- Lack of needed icebreakers: Several US military leaders argue that "the nation's icebreaking capability has diminished substantially and is at risk of being unable to support our national interests in the Arctic regions."<sup>20</sup> The United States currently has only three Polar-class icebreakers, two of which surpassed their 30-year service life.<sup>21</sup> It would cost \$800-\$925 million and take 7-10 years to build a new Polar-class icebreaker and cost over \$56 million just to reactivate one of the older cutters for another decade.<sup>22</sup> Until the Arctic is completely ice-free, ice breakers will remain the most effective instrument for large scale, timely disaster response and for the maintenance of passable sea routes.

## Policy Options for Building the Arctic Superhighway

The United States has several policy options to create the Arctic Superhighway: maintenance of the status quo, unilateral development by the U.S. government and American business, a single comprehensive multilateral development treaty, and a network of international agreements to facilitate the development of the various elements of the superhighway. The creation of an Arctic Superhighway through the simultaneous use of bilateral treaties and incremental multilateral framework agreements is the most effective option to exploit emerging economic opportunities.

#### 1. Maintain The Status Quo

Given the uncertainty surrounding possible resources and changing ice conditions in the Arctic, it is tempting to maintain the status quo and not invest in new capabilities to exploit opportunities in the High North. Even if these predictions hold true, Arctic infrastructure is difficult to develop and costly to maintain due to frigid temperatures, drifting ice, poor soil conditions, and geographic isolation.

*Strengths*: The United States government and American companies would conserve resources and avoid the risk of uncertain Arctic development. These resources could instead be applied to more predictable and proven methods to improve transportation and access new energy reserves.

*Weaknesses*: Other nations, such as Russia and Canada, will continue to develop new technologies to better exploit their Arctic resources, and the United States will lose a limited chance to gain from new economic opportunities in the Arctic. Current technologies are also inadequate to respond to environmental disasters in the Arctic.

#### 2. Unilateral access and development

The United States could act unilaterally to develop an Arctic Superhighway for extracting natural resources and opening new shipping routes. American companies would be required to significantly increase investment in highly specialized capital for Arctic resource extraction, and the U.S. government would need to develop new capabilities to patrol and secure the Arctic.

*Strengths*: The United States could restrict its activity to its Exclusive Economic Zone, which would be easier and less costly than trying to cover the high seas in the Arctic.

Weaknesses: This scenario would deny the United States the benefits of a true trans-Arctic shipping route and prove extremely costly, both in terms of financial expenses and international political capital. It could also lead to conflict with other Arctic states over the future of the region and leave the United States with an inadequate support network in the event of a human or environmental catastrophe.

#### 3. Multilateral development through a single binding treaty

Building on the success of the Antarctic Treaty, which established comprehensive rules for Antarctica through a single binding treaty, the United States could lead the creation of an "Antarctic Treaty for the Arctic" to establish the Arctic Superhighway. This approach would include creating binding obligations on a wide range of issues, from shipping access and resource extraction to military operations and research opportunities. The United States could remain outside UNCLOS to avoid unpopular resource-sharing obligations which might discourage investment in those resources. This new treaty would likely need to encompass many of the basic provisions of UNCLOS, however, in order to protect other states' interests in their territorial waters.

*Strengths*: This option would likely be the best way to protect the Arctic environment and establish predictable shipping conditions. Congress would be more likely to support a proposal that avoids joining UNCLOS.

Weaknesses: Binding regulations would be difficult to amend in the face of changing conditions, and states would delay ratification of such regulations until the future of the Arctic was more certain. By then it may be too late to prevent irreparable environmental

damage or a wasteful duplication of efforts as states try to grab as much as possible before a treaty restricts such activities. A binding treaty might also produce weak standards based on the "lowest common denominator." The Arctic states previously stated their belief that existing international law provides a suitable framework for the Arctic in the Ilulissat Declaration and the Tromsø Declaration, indicating that this option is not popular at present.

## 4. The Arctic Superhighway: Voluntary multilateral development

A combination of multilateral framework agreements and specific bilateral treaties could pave the way for the development of an Arctic Superhighway by providing solutions to three major obstacles: insufficient communications and search and rescue capabilities, vague and ineffective regulations for shipping and resource extraction, and competing territorial claims.

## • Communication and Search and Rescue (SAR): The Arctic's "AAA"

Shipping and resource companies want to protect their investments and employees in the Arctic, but they lack the resources to offer complete protection individually. The Arctic nations could coordinate their communication and SAR capabilities to cover all areas of operation in the Arctic through multilateral assistance agreements. Multinational search and rescue procedures and responsibilities could be based on current systems like the Automated Mutual-Assistance Vessel Rescue System (AMVER) which includes 17,000 vessels from 155 countries. This basic mutual assistance scheme could be augmented with interoperability guidelines and other requirements to overcome unique Arctic challenges.

#### • Shipping and Resource Extraction: Rules of the Road

The International Maritime Organization (IMO) approved "Guidelines for Ships Operating in Arctic Ice-Covered Waters" in 2002. The Guidelines present comprehensive standards for construction, equipment, and operation of vessels in the Arctic.<sup>23</sup> The present Guidelines lack any compliance requirements or mechanisms.<sup>24</sup> The Arctic Council also outlined voluntary "Offshore Oil and Gas Guidelines" for resource exploration and exploitation.

Both of these voluntary agreements could be the foundation of binding multilateral framework agreements. These agreements would use the incremental approach pioneered in climate change agreements to require stricter standards as Arctic research and technology advance. States and companies would support such agreements because they would be able to meet the relatively low initial standards and then work up to stricter standards over time.

## • Competing Territorial Claims: Mapping the Road

The United States needs to resolve outstanding territorial disputes with Canada and establish a procedure with Russia to recognize continental shelf claims if the

United States remains outside of the UNCLOS system. Bilateral treaties with the relevant states are the most direct solution to these issues. These treaties would delineate access rights to certain waters and specially equipped ports, resolve territorial disputes, provide for joint patrols, and harmonize fees and regulations. The United States can also benefit from close cooperation with Canada on border and customs patrols, icebreaking, navigational maintenance, and search and rescue.

Strengths: This option ensures that the United States can benefit from faster, cheaper trans-Arctic shipping and new energy reserves at the lowest cost and risk to the United States. The network of agreements will be easier to negotiate and ratify than a single binding treaty which would likely be seen as an infringement on U.S. sovereignty and an impediment to American business interests. The combination of multilateral framework agreements and issue-specific bilateral treaties allows states to adapt to changing conditions and emerging opportunities while achieving minimum requirements to overcome known obstacles.

Weaknesses: This option requires the active leadership of an influential state to coordinate the parallel development and implementation of the three major components of the Arctic Superhighway. To date, no state has been willing to guide this process.

#### Conclusion

The United States has a limited timeframe to take advantage of emerging economic opportunities in the Arctic by shaping the course of Arctic shipping and resource extraction. The Arctic Superhighway is the most effective strategy for the United States in the Arctic because it will reduce the burden on the United States while improving safety and reliability along the entire transit route and opening faster, cheaper shipping lanes sooner than unilateral development. The Superhighway provides freedom for a broader U.S. strategy in an ice-free Arctic by overcoming current obstacles such as minimal long range communications, limited disaster response capability, unresolved territorial disputes, and unregulated resource extraction practices.

41

<sup>&</sup>lt;sup>1</sup> John Roach, "As Arctic Ice Melts, Rush Is On for Shipping Lanes, More," National Geographic, 25 February 2005

http://news.nationalgeographic.com/news/2005/02/0r225\_050225\_arctic\_landrush.html (accessed 9 January 2010).

<sup>&</sup>lt;sup>2</sup> Di Silvestro, Roger. "The Proof is in the Science." *National Wildlife*. In *The Reference Shelf: Global Climate Change*.

Ed. Paul McCaffrey. H. W. Wilson, 2006. 10.

<sup>&</sup>lt;sup>3</sup> John Roach, "As Arctic Ice Melts, Rush Is On for Shipping Lanes, More."

<sup>&</sup>lt;sup>4</sup> Matt Hilburn, "Trans-Arctic Shipping?" Seapower 51, no. 8 (Aug. 2008): 34-36, http://www.web.ebscohost.com (accessed 9 January 2010). 34.

<sup>&</sup>lt;sup>5</sup> Brian Beary, "Race for the Arctic," CQ Researcher 2, no. 8 (August 2008), http://library.cqpress.com (accessed 10 January 2010).

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

- <sup>9</sup> United States Geographical Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," 4.
- <sup>10</sup> U.S. Energy Information Administration, "Arctic Oil and Natural Gas Potential," 7.

<sup>11</sup> Brian Beary, "Race for the Arctic."

<sup>12</sup> UNCLOS. Part VI. Article 76. 53-54. Other rules/guidelines established in Article 76.

<sup>13</sup> UNCLOS. Part VI. Article 81. 55.

- <sup>14</sup> IMO. "Guidelines." Guide. Paragraph 2.1-2.5. 4.
- <sup>15</sup> The Arctic Council. "Offshore Oil and Gas Guidelines." October 2002 Ministerial Meeting, Inari, Finland. Preamble.
- 16 "Declaration on the Establishment of the Arctic Council." Signed 19 September 1996 in Ottawa. http://arctic-council.org/section/founding\_documents
- <sup>17</sup> The Arctic Council. "Tromsø Declaration." 29 April 2009. Sixth Ministerial Meeting of the Arctic Council. 1. http://arctic-council.org/section/documentation.
- <sup>18</sup> Bowell, Randy. "NDP Press Harper to Raise U.S.-Canada Boundary Dispute with Obama." Canwest News Service,

15 September 2009.

http://www.canada.com/news/press+Harper+raise+Canada+boundary+dispute+with+Obama/1997222/story.html

19 "Northwest Passage gets political name change." The Edmonton Journal, 6 April 2006.

http://www.canada.com/edmontonjournal/news/story.html?id=6d4815ac-4fdb-4cf3-a8a6-4225a8bd08df

- <sup>20</sup> General Reunart, General Schwartz, and Admiral Keating. "Memorandum for Chairman, Joint Chiefs of Staff on Icebreaker Support."
- <sup>21</sup> Webber, Caitlin. "Aging Icebreaker Fleet Threatens U.S. Position as Arctic Opportunities Emerge." *Congressional*

Quarterly, 21 July 2008. http://public.cq.com/docs/hs/hsnews110-00002922311.html

<sup>22</sup> Webber, Caitlin. "Aging Icebreaker Fleet Threatens U.S. Position as Arctic Opportunities Emerge." Congressional

Quarterly, 21 July 2008. http://public.cq.com/docs/hs/hsnews110-000002922311.html

<sup>23</sup> IMO. "Guidelines." Guide. Paragraph 1.1. 3.

<sup>24</sup> IMO. "Guidelines." Preamble. Paragraph 1.3. 2.

## COUNTERING RADICALISM WITH A "VIRTUAL LIBRARY OF FREEDOM"

#### HANNAH THORNTON

Terrorist organizations use the internet as a tool for spreading their ideology. The absence of an equivalent moderate presence online gives radical groups a significant advantage in the virtual war of ideas. To respond to this radical threat, this brief proposes the creation of a "Virtual Library of Freedom" to empower moderate voices. The Library would contain historical and contemporary documents in a variety of languages addressing topics such as good governance and human rights. It would be targeted toward young, well-educated people – also the object of terrorist propaganda online - who have not yet chosen to turn to terrorism. The site would allow people to form networks and initiate discussion, giving them the tools to contest terrorist ideologies.

## Radical Groups' Use of the Internet

The majority of the forty-five groups designated as Foreign Terrorist Organizations (FTOs) by the U.S. Department of State use the internet as a principal tool for spreading and collecting information, networking, and recruitment. Between 1998 and 2006, the number of terrorist-supported websites increased from 12 to over 4,300. The most popular sites receive tens of thousands of visitors each month from around the world. The sophisticated technology incorporated into these sites resembles the technology employed by large Western corporations. For example, HAMAS's website and Microsoft.com share "over 20 highly valuable design features, including search engines, mission statements, a 'what's new' section and a frequently-asked-questions page."

Terrorist websites have four main purposes:<sup>5</sup>

- 1. <u>Information Dissemination</u>: The internet is used to spread radical messages, and terrorist groups gain credibility with well-maintained websites.
  - a. *Advantages*: Well-designed websites can make groups appear more powerful than they are in reality. By using the internet as an outlet, terrorist groups can also circumvent the censorship of the mainstream media.<sup>6</sup>
  - b. *Example*: "Al Battar Training Camp," al Qaeda's online training magazine, is "devoted to practical instructions in specific terrorist practices, including

- assassinations, intelligence gathering, kidnapping, bombs and explosives, guns and ammunition, fighting in cities, use of poisons, and so on."<sup>7</sup>
- 2. <u>Information Gathering</u>: Knowledge gathered online through search engines, e-mail distribution lists, chat rooms, and discussion groups can be critical to the development of terrorist operations. Groups use these tools to "data mine" for information on schedules and locations of targets, such as transportation facilities, nuclear power plants, public buildings, and airports.<sup>8</sup>
  - a. *Advantages*: Terrorists can gather information on a range of topics, including instructions for constructing a bomb and blue prints to certain buildings.<sup>9</sup>
  - b. *Example*: Al Qaeda maintains a large internet database that contains information about potential targets in the U.S. This information, combined with advanced software, allows them to predict the impact of an attack on a target in terms of human lives and structural damage. <sup>10</sup>
- 3. Networking: The internet flattens the organizational structure of terrorist groups by facilitating communication and planning while simultaneously requiring minimal resources. According to a special report from the National Communications System, "Many terrorist organizations have undergone a transformation from strictly hierarchical organizations...to affiliations of...semi-independent cells. Through the use of the Internet, loosely interconnected groups without clearly designated leaders are able to maintain contact and communication."
  - a. *Advantages*: Communication can be achieved anonymously through online encryption services, short term email accounts, anonymous logins to chat rooms, and public wireless networks. The internet also eliminates the need for a physical meeting place, the risk involved in personal contact, and the chances of an individual being targeted for terrorist activity.<sup>12</sup>
  - b. *Example*: In his article "Al Qaeda and the Internet," T.D. Thomas notes that a website used by Chechen separatists in Russia contains links to jihad activists in Afghanistan and Palestine, creating the impression that these groups are united globally against the West. As a result, the internet fosters connections not only within groups, but also across different terrorist organizations.
- 4. Recruitment: Using the internet, terrorist groups can tap into pools of potential recruits that were previously unreachable through traditional means. Internet technology has also allowed radical groups to reach people globally at a much lower cost. This technology can change site content to cater the message to different groups. Users can be redirected to customized versions of an organization's site once their computer's default language is detected. Interactive technology is then utilized on these customized sites to find the users who seem receptive to the terrorist message, the ideal candidates for recruitment.<sup>15</sup>

- a. *Advantages*: Sites tailored to different audiences can enhance the odds of recruiting non-traditional group members. Interactive technology also allows terrorist groups to respond to criticism or certain events, and then, adjust site content to maximize the group's appeal. <sup>16</sup>
- b. *Example*: Ziyad Khalil, a student at Columbia College in Missouri, became an al Qaeda procurement officer in the United States due to his internet activity. He caught bin Laden's attention through his website, which was supported by HAMAS, and his virtual links to many other radical groups.<sup>17</sup>

## **Lack of Response to Radicalism Online**

- Public Diplomacy Perceived as Western Propaganda: U.S. government policies are broadly focused on governmental change, specifically democracy promotion. The Bush Administration attempted to spread democracy with a military approach to public diplomacy. Due to the administration's stated objective of advancing U.S. national interest, it was perceived abroad as a form of U.S. propaganda. The Obama Administration has changed this tactic, but the U.S. image has yet to recover. The open source features, translation capabilities, and contextual information available on the "Virtual Library of Freedom" will avoid this aura of propaganda. By allowing for discussion and user input, the site does not force a monolithic conception of democratic ideals.
- <u>Minimal Technological Innovation</u>: U.S. public outreach methods are rooted in a Cold War mentality: slow to change and unable to catch up to the capabilities of advanced communications technologies. For example, Voice of America, the largest international broadcaster in the United States, only dedicates 6% of its budget to the internet, with a majority of its efforts focused on traditional media outlets. The internet, however, is a key tool when trying to reach terrorist groups' target demographic: the youth of the middle class. Although current U.S. policy largely overlooks this group, the "Virtual Library of Freedom" targets this demographic specifically.
- Insufficient Non-Governmental Initiatives: Non-governmental organizations that promote moderate political ideals have an online presence, but have not directly addressed the online threat of terrorist groups. The International Republican Institute (IRI) and the National Democratic Institute (NDI) work with local partners worldwide to provide training for groups that seek to advance democracy in their countries. NDI's website also contains a limited list of documents from international organizations. This online space is a one-dimensional resource: the documents are not available in many relevant languages, and there is no interactive feature. The "Virtual Library of Freedom" provides such a forum and also contains an extensive database of documents in multiple languages.
- <u>Technological Barriers to Fighting Radicalism Online</u>: It is impossible to prevent terrorist organizations from using the internet. First, the internet is mainly unregulated, with

minimal restrictions on usage.<sup>20</sup> Second, many web hosting sites provide free or inexpensive services and have no incentive to track their subscribers. Finally, due to extremely low operating costs, websites can be moved easily when detected or hacked. Due to the sheer size of this electronic space, it is difficult to track sites that are constantly moving.<sup>21</sup>

## Solution: Creation of a "Virtual Library of Freedom"

Terrorist groups have effectively brought the war of ideas to the internet. Thousands of radical sites exist in comparison to the very small number of sites that support moderate political ideals.<sup>22</sup> This situation creates an exaggerated perception of the radicals' power and discourages moderates from challenging this seemingly insurmountable force. <sup>23</sup> Creating a "Virtual Library of Freedom" provides a positive resource for moderates and reformers in the online fight against radical ideas. It transcends current governmental and non-governmental methods by providing a space for discussion about human rights, good governance, organization of political campaigns and parties, and other topics.

This database will receive funding and support from private donors and NGOs, but remain unconnected to government organizations. It will be hosted at an educational institution that is independent from the government and perceived as ideologically and value neutral. The site will also seek partners in the Islamic world. Partners could include the Center for the Study of Islam and Democracy or an Islamic research center.

The structure of the "Virtual Library of Freedom" capitalizes on the same advantages that terrorist groups gain by using the internet. The development of the site can be divided into four steps:

- 1. <u>Collect Documents</u>: The first step is to compile documents from around the world to populate a database. Historically significant and contemporary documents will be chosen by a review board of academics and NGO employees, who will also evaluate suggestions from users. Documents will be chosen with the aim of informing moderates and providing them with textual sources to support them in debates against terrorist organizations. [See Appendix A for the list of suggested preliminary documents, categorized by topic.]
  - a. *Strategic Goal*: Posting these documents will give readers the ability to form and support moderate ideas.
- 2. <u>Translate Documents</u>: The database will be available in many languages to ensure a broad reach to the same audiences targeted by terrorist websites. Arabic will be the primary focus. Other priority languages, which will be incorporated later, will include those spoken in areas considered vulnerable to terrorist recruitment, such as Farsi and Urdu. Additionally, the general content of the website will also be translated into these priority languages.

- a. *Strategic Goal*: By providing this information in key languages, the Library's message can potentially reach the same number of people that terrorist organizations reach with their sophisticated sites.
- 3. <u>Contextual Information</u>: Historical background information will be available for every document and author, as well as general information on each topic. This feature will help users who are unfamiliar with the site's subject matter. Additional user resources will include links to similar documents and critiques of the topics, documents, or authors, and links to other websites that promote similar ideas.
  - a. *Strategic Goal*: The ideas and theories of these documents will not be presented as absolute fact. Background information will allow better understanding of the development of these ideas and will assist users to apply these ideas to their own situations.
- 4. <u>An Interactive Site</u>: Users will be able to engage in discussion and debate through a blogging feature. The blog will include Google translation capabilities to allow communication across languages. The website will also have a wiki feature. This feature will allow users to suggest new documents and languages, comment directly on posted documents, or assist in the translation process. A professional review process by a staff translator will be included for suggested translations.
  - a. *Strategic Goal 1*: Interactive technology builds connections. Creating networks between like-minded moderates provides them with the support and courage to reject terrorist ideologies.
  - b. *Strategic Goal 2*: The open-source feature of the site allows the Library to gather information from its users. By understanding what type of documents and languages are in demand on the site, it can cater to its audience's needs.

## Logistics and Costs of the "Virtual Library of Freedom"

The costs required to develop the "Virtual Library of Freedom" are minimal. Initial costs can be divided into four main categories:

- 1. <u>Translation</u>: Translating documents is the first and largest step in developing the website. Before the website can be developed, an initial set of core documents must be translated. The most critical documents will be chosen and translated into Arabic first. Users will then be encouraged to contribute to the translations and suggest additional documents to be translated later, or languages to be incorporated. Students with academic language experience or a native language other than English could be hired for the initial translation work. With sufficient funding, a professional translation agency could be hired to review initial efforts or initiate translation.
  - a. Cost: \$8/hour for undergraduate translators. 24

- b. Cost: \$0.16 per word for professional translation.<sup>25</sup>
  - i. Example: United Nations Charter \$1,425.28 (8,908 words)
  - ii. Example: Mahatma Gandhi, "Quit India" speech \$175.20 (1,095 words)
- 2. Website Development: Translated documents and website content will be given to a web developer. The developer will set up a domain name (\$10 per year) and work with a shared web hosting provider (\$5-10 per month). Use of a content management system, such as Drupal, will decrease web development time and enable non-technical staff to manage content without the help of the developer. A website developer could be hired at a rate of \$10-20 per hour, or a flat project rate. The hardware for the site, the server that would connect it to the internet, will be provided by a company like DreamHost. This provider charges \$69/month to rent a dedicated server with 100-200 GB of storage space, enough space for approximately 100,000 documents.
  - a. Cost: approximately \$50,000 for design and initial fees.
- Marketing: Marketing can be divided into two sub-categories: traditional marketing methods and social media. The marketing campaign would target young, well-educated people, who are politically undecided, and who are looking for a choice other than radicalism.
  - a. *Traditional marketing* would include Google ads, spots in newspapers, and travel for a staff member to spread the word about the site.
    - i. Cost: \$10,000 per year for traditional marketing.<sup>26</sup>
  - b. Social media has emerged as a new outlet for inexpensive marketing and for spreading ideas. Social networking sites and video uploading technology will be used to reach the target audience. Websites such as "The Hub" post video submissions and encourage discussion of global human rights issues. Some social networking sites include: Drupal's open source system; Orktu, networking in India and Brazil; Muxlim, networking for Muslims; and KalamArab, popular in Arabic speaking countries. Blog sites can also be utilized for outreach. Use of these social media sites for marketing will then encourage users to initiate discussion once they have entered the "Virtual Library of Freedom."
    - i. Cost: \$45,000-55,000 per year for social media director. <sup>29</sup>
- 4. <u>Staff</u>: A small staff would be needed to initiate development of the website. Two entry-level staff members and up to six research assistants would be needed to draft text for welcome pages and contextual information. The staff would need to review documents for posting and monitor the blog portion of the site. Technical staff would need to be hired on an ad-hoc basis for general website upkeep.

- a. Cost: \$30,000-40,000 per year for entry level staff; \$8 per hour for undergraduate research assistants.
- b. Cost: \$30,000 per year for technical consultant.

The bottom line for the start-up cost of this project is approximately \$235,700, and the maintenance costs will be around \$265,000 per year, which will decrease over time. This total is a small expense relative to the large budget dedicated to traditional forms of governmental public outreach.

#### **Appendix A: Documents**

## **Civil Liberties:**

- The Four Freedoms by Franklin Roosevelt
- International Covenant on Civil and Political Rights
- Islam and Democracy: Toward Effective Citizenship by the Center for the Study of Islam and Democracy and StreetLaw Inc.
- Religious Freedom:
  - Letter Concerning Toleration by John Locke
  - o An Act for Establishing Religious Freedom by Thomas Jefferson
- Self-Reliance by Ralph Waldo Emerson
- A Theory of Justice by John Rawls

## <u>Development</u>:

- Arab Human Development Report
- Declaration on the Right to Development
- European Social Charter
- Economic Bill of Rights by Franklin Roosevelt
- International Covenant on Economic, Social, Cultural Rights
- Islam and Modernity by Grand Mufti of Egypt Ali Gomaa
- Millennium Development Goals

#### Good Governance:

- Anarchy, State, and Utopia by Robert Nozick
- Anti-corruption Plain Language Guide
- Common Sense by Thomas Paine
- Constitutions
  - o Constitution of India
  - The Constitution of South Africa
  - o The Constitution of the United States of America, Amendments, Bill of Rights
  - o The French Declaration of the Rights of Man and Citizen
  - o Magna Carta Libertatum (The Great Charter of Freedoms)
- Convention Against Corruption
- Federalist Papers
- Freedom From Fear by Aung San Suu Kyi
- Inclusion and Democracy by Iris Marion Young
- The Social Contract by Jean-Jacques Rousseau
- The Spirit of the Laws by Montesquieu
- Two Treatises of Government by John Locke
- Tryst With Destiny by Jawaharlal Nehru

## **Human Rights**:

- American Convention on Human Rights
- Amnesty International Program for the Prevention of Torture
- Convention on Prevention and Punishment of Genocide
- Declaration of Independence by Thomas Jefferson
- Declaration on the Rights of Peoples to Peace
- European Convention for the Protection of Human Rights
- Inter-American Convention to Prevent and Punish Torture
- International Treaty for Children's Rights
- Islam and Human Rights by Emran Qureshi and Heba Raouf Ezzat
- The Last Sermon by Archbishop Oscar Romero
- Perpetual Peace by Immanuel Kant
- Universal Declaration of Human Rights
- United Nations Charter
- Convention on the Elimination of All Forms of Discrimination Against Women
- Gender Equality in Islam by Jamal Badawi
- Male Domination of Women by Benazir Bhutto
- The Rights of Women by Shirin Ebadi
- The Subjection of Women by John Stuart Mill
- A Vindication of the Rights of Woman Mary Wollstonecraft
- I Am Prepared To Die by Nelson Mandela
- I Have A Dream Speech by Martin Luther King Jr.
- International Convention on the Elimination of All Forms of Racial Discrimination
- South African Congress Alliance Freedom Charter

#### **International Relations:**

- Farewell Address to the General Assembly by Kofi Annan
- The Helsinki Agreement
- On Human Rights and Foreign Policy by Theodore Roosevelt
- Speech on Humane Foreign Policy by Jimmy Carter

#### Non-Violent Protest:

- Apology and Crito by Plato
- 1989 Nobel Peace Prize Acceptance Speech by The 14<sup>th</sup> Dali Lama
- Heroes of Hellfire, a fatwa by Tahir ul-Qadri
- Letter from a Birmingham Jail by Martin Luther King Jr.
- On the Duty of Civil Disobedience by Henry David Thoreau
- The Quit India Speech by Mahatma Gandhi
- Reflections on the Revolution in France by Edmund Burke

## Organization of Campaigns, Elections, and Meetings:

- The Campaign Staff
- Code of Good Practice in Electoral Matters: Venice Commission
- Declaration of Principles for International Election Observers and Code of Conduct for International Election Observers: commemorated at UN in 2005
- Developing a Campaign Plan
- For Entrepreneurs: Advice for Administrative Professionals, Running a Good Meeting
- Political Parties as Campaign Organizations by David M. Farrell and Paul Webb
- Robert's Rules of Order

Office for the Coordinator for Counterterrorism, "Foreign Terrorist Organizations: July 7, 2009," U.S. Department of State, http://www.state.gov/s/ct/rls/other/des/123085.htm.

<sup>&</sup>lt;sup>2</sup> Gabriel Weimann, Terror on the Internet: the New Arena, the New Challenges (Washington D.C.: Endowment of the US Institute of Peace, 2006), 2.

<sup>&</sup>lt;sup>3</sup> Maura Conway, "Terrorism and the Internet: New Media-New Threat?," Parliamentary Affairs 59, no.2 (2006):238-298.

<sup>&</sup>lt;sup>4</sup> T. D. Bailey and M.R. Grimaila, "Running the Blockade: Information Technology, Terrorism, and the Transformation of Islamic Mass Culture," Terrorism and Political Violence 18 (2006): 523-543.

<sup>&</sup>lt;sup>5</sup> Terrorist groups differ in their tactics and uses of the internet as a tool. The four purposes listed here can be broadly applied, with some variation across various types of groups. There are also other reasons for terrorist organizations to use the internet. For example, financing terrorist activities through online donations or solicitation has become popular in recent years. See Conway 2006, 249-250; T.L. Thomas, "Al Qaeda and the Internet: The Danger of 'Cyberplanning'," Parameters Spring (2003): 112-122, http://carlislewww.army.mil/usawc/Parameters/03spring/thomas.htm.

<sup>&</sup>lt;sup>6</sup> Conway 2006, 248.

<sup>&</sup>lt;sup>7</sup> Weimann 2006,

<sup>&</sup>lt;sup>8</sup> Weimann 2006, 9.

<sup>&</sup>lt;sup>9</sup> Thomas 2003, 118.

<sup>&</sup>lt;sup>10</sup> Dan Verton, Black Ice: The Invisible Threat of Cyber-Terrorism (New York: McGraw-Hill Osborne Media,

<sup>&</sup>lt;sup>11</sup> "The Electronic Intrusion Threat to National Security and Emergency Preparedness (NS/EP) Internet

Communications" (report by National Communications System, Arlington, VA, December 2000), 28-31.

12 Thomas 2003, 115; Conway 2006, 252. See also David Gray and Albon Head, "The Importance of the Internet to the Post-Modern Terrorist and its Role as a Form of Safe Haven," European Journal of Scientific Research 25, no. 3 (2009): 396-404, http://www.eurojournals.com/ejsr 25 3 05.pdf. Gray and Head explain that the internet offers a new form of safe haven to terrorists. They can train, recruit, and carry out operations all under the veil of anonymity. <sup>13</sup> Thomas 2003, 118.

<sup>&</sup>lt;sup>14</sup> Weimann 2006, 117.

<sup>&</sup>lt;sup>15</sup> Thomas 2003; Michele Zanini and Sean J.A. Edwards, "The Networking of Terrorism in the Information Age," in Networks and Netwars: The Future of Terror, Crime, and Militancy, ed. John Arquilla and David Ronfeldt (Santa Monica, CA:RAND Corporation, 2001), 29.

<sup>&</sup>lt;sup>16</sup> Gabriel Weimann, "Virtual Disputes: The Use of the Internet for Terrorist Debates," Studies in Conflict & Terrorism 29, no. 7 (2006): 627.

<sup>&</sup>lt;sup>17</sup> Weimann 2006, 119.

<sup>&</sup>lt;sup>18</sup> Robert Bryce, "Press 0 for Arabic: Washington Tries to Fight the War on Terror in English Only," *The American* Conservative, July 2, 2007.

<sup>&</sup>lt;sup>19</sup> Bruce Hoffman, "Inside Terrorism: Al-Qaeda's New Strategy," (presentation at the College of William and Mary, Williamsburg, VA, April 7, 2010).

<sup>&</sup>lt;sup>20</sup> Benjamin R. Davis, "Ending the Cyber Jihad: Combating Terrorist Exploitation of the Internet with the Rule of Law and Improved Tools for Cyber Governance "CommLaw Conspectus 15 no. 129 (2006-2007): 128 <sup>21</sup> Ibid.; Hinnen 2004, 18.

<sup>24</sup> Aneta Leska Baltes, Budget and Administrative Manager, Project-Level Aid and AidData, March 15, 2010.

Michael Chandler and Rohan Gunaratna, Countering Terrorism: Can We Meet the Threat of Global Violence (London: Reaktion Books Ltd., 2007), 182.
 Michael Chandler and Rohan Gunaratna, Countering Terrorism: Can We Meet the Threat of Global Violence

<sup>&</sup>lt;sup>23</sup> Michael Chandler and Rohan Gunaratna, *Countering Terrorism: Can We Meet the Threat of Global Violence* (London: Reaktion Books Ltd., 2007), 182; Office for the Coordinator for Counterterrorism, "National Counterterrorism Center: Annex of Statistical Information," Country Reports on Terrorism 2008, posted March 20, 2009, http://www.state.gov/s/ct/rls/crt/2008/122452.htm.

<sup>&</sup>lt;sup>25</sup>Translation Services USA, e-mail correspondence of translation quote, February 1, 2010. See http://www.translation-services-usa.com/document.php.
<sup>26</sup>Ibid.

<sup>&</sup>lt;sup>27</sup> "The Hub" is sponsored by WITNESS, an international human rights organization. See: http://hub.witness.org/.

<sup>&</sup>lt;sup>28</sup>"A World of Connections: A Special Report on Social Networking," *The Economist*, January 30, 2010, Print edition; "Global Swap Shops: A Special Report on Social Networking," *The Economist*, January 30, 2010, Print edition.

<sup>&</sup>lt;sup>29</sup>Jim Durbin, "Social Media Salaries," Jobs in Social Media, posted November 18, 2008, http://www.jobsinsocialmedia.com/profiles/blogs/social-media-salaries.

# $\left. P \left| I \right| P \right| S$ The Project on International Peace and Security

## 2009-2010 RESEARCH FELLOWS



ALEXANDER BELLAH, CLASS OF 2011
"Shifting Paradigms: Taiwan's New Asymmetric Strategy to Deter Blockade"



RAYMOND CIABATTONI, CLASS OF 2010 "Modifying the Madrassa: Promoting Moderate Islamic Education"



KIRAN LEVENT, CLASS OF 2011
"A Different Fight: Narco-Commercialist Insurgencies in Mexico"



MEGAN LIABOE, CLASS OF 2010 "Afghanistan and the Search for a Sustainable Economy"



KRISTOPHER MCCLELLAN, CLASS OF 2010 "America and the Artic Superhighway: Developing Economic Opportunities in a Warming Artic"



HANNAH THORNTON, CLASS OF 2010 "Countering Radicalism with a 'Virtual Library of Freedom'"

# P|I|P|S The Project on International Peace and Security

## 2009-2010 RESEARCH INTERNS



PATRICIA AUSTRIA, CLASS OF 2013 "Afghanistan and the Search for a Sustainable Economy"



NICHOLAS BELL, CLASS OF 2012 "America and the Artic Superhighway: Developing Economic Opportunities in a Warming Artic"



DAVID NEWBRANDER, CLASS OF 2013 "A Different Fight: Narco-Commercialist Insurgencies in Mexico"



WILLIAM SHIMER, CLASS OF 2013 "Modifying the Madrassa: Promoting Moderate Islamic Education"



ALENA STERN, CLASS OF 2012 "Countering Radicalism with a 'Virtual Library of Freedom"



GREGORY YELLEN, CLASS OF 2013 "Shifting Paradigms: Taiwan's New Asymmetric Strategy to Deter Blockade"