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14. ABSTRACT

The United States must assume that Myanmar's military still intends to develop a nuclear weapon and, as a result, will further destabilize the region. The US must make this assumption despite Myanmar's recent progress toward becoming a democracy and their civilian leadership signing of Additional Protocols with the International Atomic Energy Agency (IAEA) in September 2013. The author makes three arguments to corroborate this thesis. First, Myanmar's military is still largely in control of the country and their recent statements regarding a nuclear program contradict their civilian leadership position. Second, Myanmar's military actions concerning developing a nuclear weapon capability have continued undeterred despite the nation's quasi-democratic transition. The final reason is Myanmar's lack of nonproliferation progress since signing the Additional Protocols last September indicates that the military does not intend to allow IAEA inspectors access to their clandestine military research sites. The author concludes with recommendations for the United States government and military leaders to compel the Myanmar government and military to cease any nuclear weapon program and allow IAEA inspectors access to suspect Myanmar military facilities.

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**NAVAL WAR COLLEGE
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Nuclear Myanmar; Same Book, Different Cover

by

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Colonel, US Army

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

A handwritten signature in black ink, appearing to be 'D. Sullivan', written over a horizontal line.

30 October 2014

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Paper Abstract

The United States must assume that Myanmar's military still intends to develop a nuclear weapon and, as a result, will further destabilize the region. The US must make this assumption despite Myanmar's recent progress toward becoming a democracy and their civilian leadership signing of Additional Protocols with the International Atomic Energy Agency (IAEA) in September 2013. The author makes three arguments to corroborate this thesis. First, Myanmar's military is still largely in control of the country and their recent statements regarding a nuclear program contradict their civilian leadership position. Second, Myanmar's military actions concerning developing a nuclear weapon capability have continued undeterred despite the nation's quasi-democratic transition. The final reason is Myanmar's lack of nonproliferation progress since signing the Additional Protocols last September indicates that the military does not intend to allow IAEA inspectors access to their clandestine military research sites. The author concludes with recommendations for the United States government and military leaders to compel the Myanmar government and military to cease any nuclear weapon program and allow IAEA inspectors access to suspect Myanmar military facilities.

Introduction

On 17 September 2013, Myanmar's Foreign Minister, Wuna Maung Lwin, signed a historic agreement with the International Atomic Energy Agency (IAEA). His signing Additional Protocols assures to the international community that Myanmar is not developing a nuclear weapon capability. This past year, United States and United Kingdom experts met with Myanmar representatives to help guide them through the complicated process of full compliance with the Additional Protocols. Optimism abounds within the United States government regarding Myanmar. Many believe that Myanmar is now removing the smoke screen behind which they have been suspected of secretly developing a nuclear weapon. However, below the surface of Myanmar's civilian leadership, remains a strong military that still runs the country. Their actions and rhetoric continue to raise suspicion of Myanmar's actual intent regarding nuclear weapons. The military's senior leadership statements and actions contradict their political leader's recent nuclear commitments. This strong military control concerns the international community regarding Myanmar's actual nuclear intentions.

In July 2014, the United States Department of State reported "US confidence in Burma's peaceful intentions regarding its nuclear activities continued to grow in 2013."¹ This research paper argues the exact opposite point; that the United States should be losing confidence in Myanmar's intent to ratify and comply with the Additional Protocols they signed in September 2013. By analyzing Myanmar's military recent actions or lack of actions in support of the

¹ US Department of State Bureau of Arms Control, Verification and Compliance, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Released July 2014), 21.

nation's nonproliferation obligations, one can conclude that Myanmar military leadership has no intention of complying. This essay will explain why the United States must assume that Myanmar's military still intends to develop a nuclear weapon and, as a result, will further destabilize the region. The three arguments corroborate this thesis. First, Myanmar's military is still in control of the country and their statements over the past two years contradict their civilian leadership position. Second, Myanmar's military actions concerning developing a nuclear weapon capability have continued undeterred despite the nation's pseudo-democratic transition. The final reason is Myanmar's lack of nonproliferation progress since signing the Additional Protocols last September indicates that the military does not intend to allow IAEA inspectors access to their clandestine military research sites. The first necessary step is to determine who in Myanmar has the decision authority regarding whether or not to pursue a nuclear weapon.

Who is in Control of Myanmar?

When the 2008 Myanmar constitution went into effect in 2011, its design guaranteed the military's preservation of power. The constitution has numerous critical flaws. The constitution mandates that one quarter of the six hundred parliamentary seats be reserved for active duty military. The military has certain veto authorities. In certain circumstances, the military's commander in chief can assume sovereign power and govern for up to two years.²

Though Myanmar political leaders routinely espouse their commitment to nuclear nonproliferation, the Myanmar military remains the actual decision-making authority in the country. The military leadership has given little reason to the international community, thus far,

² "Burma: With Suu Kyi Blocked, Myanmar's NLD Eyes Former General for President," *Asia News Monitor*, 25 September 2014, accessed 30 September 2014, ProQuest Central (1564429233), 1.

for anyone to believe that elected Myanmar political leaders have the authority to enforce the nuclear agreements to which they have publicly committed. Even though Myanmar's Minister of Foreign Policy signed the IAEA Additional Protocols in September 2013, the constitution grants the Commander in Chief sole authority to admit inspectors into any military owned facilities.³ This constitutional authority calls into question whether or not the military will allow entrance of IAEA inspectors.

An amendment to the constitution requires at least 75 percent concurrence from the members of parliament. Given the required 25 percent military members, passing an amendment the constitution to limit the military's authorities is extremely unlikely. The ruling party of Myanmar's parliament compounds the challenges for true civilian control. Retired military officers fill the Union Solidarity and Development Party (USDP). The military commander in chief provides direct guidance to the USDP.⁴ When Myanmar held parliamentary elections in 2012, the controlling junta only opened elections for 48 of the 600 Parliament seats, thus ensuring they could still dominate the parliament and keep democratic leaning parties to a small minority.⁵ Newly elected parliament members have to swear an oath to safeguard the constitution, which makes amending it appear that much more difficult.⁶ Since Myanmar's

³ "Of Burma's Two Governments which is More Powerful?" *Asian Tribune*, 18 March 2013, accessed 03 October 2014, ProQuest Central (1317382741), Section: "Practical Application of Nargis Constitution of 2008."

⁴ IHS, *Jane's Sentinel Country Risk Assessments Southeast Asia*, Issue Thirty-five (Virginia: IHS Global Limited, 2014), 363.

⁵ Lally Weymouth, "In Burma, 'we need to empower the people,'" *The Washington Post*, 22 January 2012, accessed 05 September 2014, ProQuest Central (917013891).

⁶ "Myanmar: NLD may not achieve constitution change," *Oxford Analytica Ltd*, 25 September 2013, accessed 30 September 2014, ProQuest Central (1564620567).

parliament chooses its president, there is little hope that the president can make any changes to the military's control of government institutions. Myanmar's current president, Thein Sein, is a retired senior military officer. Given these challenges, one can conclude that government agencies remain handcuffed, whether reluctantly or willingly.

The military routinely demonstrate their autonomy and authority. In March 2014, the military's Commander in Chief, Senior General Aung Hlaing, publicly stated that he was not convinced that the military needed to relinquish power to civilian leadership.⁷ The military's high degree of autonomy has routinely resulted in noncompliance with orders from the nation's civilian leaders.⁸ In early September, 2014, the USDP, with advocating by the military, canceled the nation's by-elections scheduled for late 2014 due to fear that the USDP would lose vital popular support.⁹ In both December 2011 and January 2012, the military went against the orders of the president. Thein Sein had ordered a halt to operations in the border regions and to use force only in self-defense. Despite these orders, the military continued their counter-insurgency operations against the Kachin Independence Army (KIA).¹⁰ The final, and most concerning, example of the military's autonomy comes from the military's Directorate of Defense Industries (DDI). In July 2013, the US Treasury Department designated the DDI's leader, Lieutenant General Thein Htay, as an individual violating United Nations Security Council resolutions prohibiting arms trading with North Korea. Six months later, the Treasury Department

⁷ Ibid.

⁸ Ibid, 363.

⁹ Ibid.

¹⁰ IHS, *Jane's Sentinel Country Risk Assessments Southeast Asia*, 363.

sanctioned an additional Myanmar DDI officer as well as companies involved in Myanmar-North Korea arms trading.¹¹ President Thein Sein's spokesperson denied knowledge of these illegal transactions. His denial speaks to either Thein Sein's complicity or ignorance to what his military is doing.

Given this environment, to understand Myanmar's true nuclear intentions, one must examine senior military leaders' statements and place less value on Myanmar's civilian leaders' statements. In June 2012, Senior General Min Aung Hlaing stated that Myanmar had abandoned its nuclear program and that there was no point in having IAEA inspectors journey to the country because there was no nuclear program to see.¹² Six months later, another Senior General Min Aung Hlaing statement highlighted the gap between the political rhetoric and military action. He announced "plans to use nuclear technology for medical, research and energy purposes but not for atomic weapons development."¹³ This statement contradicted previous government statements regarding no nuclear activity. Then in July 2014, the Minister of Science and Technology, Dr. Ko Ko Oo informed Myanmar's parliament that the country was planning to build nuclear reactors for research in health and agriculture fields.¹⁴ Dr. Ko Ko Oo is a recurring

¹¹ "TREASURY DESIGNATES BURMESE COMPANIES AND AN INDIVIDUAL WITH TIES TO THE DIRECTORATE OF DEFENSE INDUSTRIES," *US Fed News Service*, Including US State News, 19 December 2013, accessed 01 October 2014, ProQuest Central (1469018044).

¹² "Of Burma's Two Governments which is More Powerful?" Section: "Can the International Community Help the Democratic Forces?"

¹³ "Of Burma's Two Governments which is More Powerful?" Section: "Can the International Community Help the Democratic Forces?"

¹⁴ "Report: Myanmar Plans to Build Nuke Reactor for Research," *Anadolu Agency: AA*, 22 July 2014, accessed 03 October 2014, ProQuest Central (1547391431).

figure over the past decade who is routinely associated with the military's suspected nuclear weapon development program.¹⁵ Based off Senior General Min Aung Hlaing and Dr. Ko Ko Oo's statements, one can conclude that Myanmar is not abandoning its intent to develop a nuclear program. Suspiciously, Myanmar has not formally informed the international community of their reversal and new intent to develop a nuclear program once again. When the Deputy Minister of the Ministry of Science and Technology made his remarks in September 2014 at the IAEA 58th General Conference, he did not refer to Myanmar's renewed intention of pursuing a nuclear program.¹⁶ The obvious questions are whether to believe the nuclear program will be for peaceful use alone and why Myanmar has not informed the IAEA of this reversal of intentions. The disconnect between senior civilian and military rhetoric adds to the fog surrounding Myanmar's true nuclear intentions. It is clear though that the military makes the decisions regarding Myanmar's nuclear program.

Myanmar's Suspected Nuclear Activities

Now that the military's leadership and rhetoric has been examined, one must look further at their actions to ascertain if Myanmar's military is intent on developing a nuclear weapon or not. Thorough analysis must examine the assistance Myanmar received from external sources and examine suspicious internal actions. International nuclear energy experts agree that Myanmar would not be able to develop a nuclear weapon program without external assistance. Both Russia and North Korea are suspected of assisting Myanmar in their efforts to develop a

¹⁵ Jeffrey Lewis, "Does Burma Still Have Nuclear Dreams?" *Foreign Policy*, 15 November 2012, accessed 03 October 2014, http://www.foreignpolicy.com/articles/2012/11/15/does_burma_still_have_nuclear_dreams.

¹⁶ Aung Kyaw Myat, Deputy Minister, Ministry of Science and Technology, Myanmar, (address, 58th Regular Session of the IAEA General Conference, Vienna, Austria, 22-26 September 2014).

nuclear program over the past two decades. Myanmar's leadership has been less than forthcoming in explaining the assistance from Russia and North Korea despite formal requests from the IAEA to submit detailed answers to such questions.¹⁷ Despite these challenges, indisputable facts remain regarding Myanmar's secret procurement of dual-use equipment. Additionally numerous defector allegations contribute to the nuclear weapon narrative. When one fuses all the separate allegations together, Myanmar's true nuclear weapon intentions become clearer.

Russia-Myanmar Nuclear Relationship

Concerning assistance from Russia, all documented assistance occurred prior to Myanmar's first democratic elections in 2010. In the early 2000s, Myanmar and Russia reached an initial agreement regarding the assistance Russia would provide Myanmar with their nuclear program. Russia provided technical training within their country for up to 628 Myanmar nuclear specialists in 2002 and 2003.¹⁸ Russia also agreed to construct a 10-15 MW light-water nuclear reactor within Myanmar.¹⁹ After approximately seven years of repeated attempts, the joint venture ceased. Four reasons existed for the project not being completed: Myanmar was not able to provide Russia with the agreed upon finances prior to initiating construction; internal unrest in

¹⁷ David Albright and Christina Walrond, "Technical Note: Revisiting Bomb Reactors in Burma and an Alleged Burmese Nuclear Weapons Program," *Institute for Science and International Security*, 11 April 2011, accessed 10 October 2014, http://isis-online.org/uploads/isis-reports/documents/Burma_Analysis_Bomb_Reactors_11April2011.pdf, 1.

¹⁸ Rohit Kumar Mishra, "THE BEAR IN THE GOLDEN LAND AN ASSESSMENT OF RUSSIA-MYANMAR TIES," *Himalayan and Central Asian Studies* 18, no. 1 (January 2014): 215-227, accessed 05 September 2014, ProQuest Central (1558302340), Section: "Russia-Myanmar Nuclear Cooperation Section."

¹⁹ Ibid, Russia-Myanmar Nuclear Cooperation Section.

Myanmar, namely the Saffron Revolution; Myanmar's strengthening of strong bilateral ties with North Korea; and IAEA inspectors raising concerns regarding the safety procedures and qualifications of those running the program.²⁰ Encouragingly, Myanmar did not try to conceal from the IAEA its intent to build this nuclear reactor.

However, suspicion has remained as to Myanmar's true intentions concerning the rationale for wanting to build the nuclear reactor. The Democratic Voice of Burma (DVB), an organization committed to bringing democracy to Myanmar, claims that Myanmar's military government feels threatened by the United States. The DVB surmises that Myanmar's military sees the acquisition of a nuclear weapon as an effective deterrent to foreign intervention -- following the North Korea model for standing up to the United States.²¹ Additionally Myanmar is a nation rich in natural gas and has made investments in hydroelectric power.²² Such vast alternatives for energy makes efforts to develop nuclear energy appear all that more suspicious. The IAEA has accepted Russian and Myanmar explanations for the nuclear reactor initiative. Concern was minimal with these initiatives until North Korea became a key security partner in the late 2000s.

North Korea-Myanmar Nuclear Ties

Since the mid-2000s, the bilateral security relationship between Myanmar and North Korea has grown significantly. This relationship appears to include assistance to Myanmar in the

²⁰ Ibid, Russia-Myanmar Nuclear Cooperation Section.

²¹ Andrew Selth, "Myanmar's Nuclear Ambitions," *Survival* 52, no. 5 (October-November 2010): 5-12, accessed 27 August 2014, Military & Government Collection, EBSCOhost (00396338), 6.

²² Ajey Lele, "NUCLEAR MYANMAR DORMANCY SHOULD NOT BE TAKEN FOR GRANTED," *Himalayan and Central Asian Studies* 18, no. 1 (Jan, 2014): 44-52, accessed 5 September 2014, ProQuest Central (1558302319), 47.

development of nuclear weapons and ballistic missiles. Since 2008, when Senior General Shwe Mann (then the nation's military leader and now the speaker of the lower house of parliament) visited North Korea, numerous revelations have drawn international concern. These suspicions concerned whether or not Myanmar was pursuing a nuclear program with North Korea's assistance.²³ Appendix A summarizes suspect Myanmar-North Korea actions. Several of Myanmar's confirmed dual-use technology procurements are particularly concerning. These procurements occurred with the backdrop of unconfirmed reports that in early 2004, Myanmar and North Korea reached a deal to build a nuclear reactor.²⁴

Several key pieces of evidence regarding North Korea's nuclear assistance to Myanmar highlight the depth of North Korea's support of Myanmar's nuclear program. In 2006, officials from North Korea's Namchongang Trading (NCG) were seen in Myanmar. The UN Security Council sanctioned NCG for the support they provided to Syria in the construction of their nuclear weapon program. They reportedly provided technical assistance and sold nuclear-related equipment to Myanmar.²⁵ In August and November 2008, North Korea sold to Myanmar three small cylindrical grinders.²⁶ In June 2009, Japan arrested and then tried and convicted three individuals in charge of companies with ties to North Korea, for attempting to sell Myanmar a

²³ Lewis, "Does Burma Still Have Nuclear Dreams?" 2.

²⁴ David Albright, Paul Brannan, Robert Kelley, and Andrea Scheel Stricker, "Burma: a Nuclear Wannabe, Suspicious Links to North Korea and High Tech Procurements to Enigmatic Facilities," *Institute for Science and International Security*, 28 January 2010, accessed 08 October 2014, <http://isis-online.org/isis-reports/detail/burma-a-nuclear-wanabee-suspicious-links-to-north-korea-high-tech-procureme/>, 6.

²⁵ Ibid, 6.

²⁶ Ibid, 8.

magnetometer.²⁷ These business fronts had also previously sold other nuclear dual-use equipment to Myanmar.²⁸ In 2009 and 2011, two North Korean vessels bound for Myanmar turned back in lieu of the US Navy inspecting them for United Nations Security Council Resolution (UNSCR) 1874 violations regarding arms trading with North Korea.²⁹ The US suspected these ships were carrying dual use nuclear and missile components. The most recent piece of evidence occurred on 22 August 2012. Several months after President Thein Sein and parliamentary leaders had stated that they had broken off all military ties with North Korea; Japan seized “50 metal pipes and 15 high-specification aluminum alloy bars, at least some of them offering the high strength needed in centrifuges for a nuclear weapons program.”³⁰ This procurement trend has continued to occur unabated despite Myanmar's democratization and nuclear nonproliferation rhetoric.

Myanmar Defector Reports

The support from Russia and more importantly North Korea is even more suspect when one analyzes defector reports. One defector claimed Myanmar was constructing two secret nuclear reactors.³¹ In 2010, a Myanmar military officer, Major Sai Thein Win defected and provided to the Democratic Voice of Burma (DVB) detailed documents and photos. Major Sai Thein Win claimed that Myanmar had a secret nuclear weapon program. Former head of the

²⁷ Ibid, 7.

²⁸ Ibid, 7.

²⁹ Lele, "NUCLEAR MYANMAR DORMANCY SHOULD NOT BE TAKEN FOR GRANTED," 49.

³⁰ Yoshihiro Makino, “Japan intercepts N. Korea weapons grade material bound for Myanmar,” *The Asahi Shimbun*, 24 November 2012, accessed 08 October 2014, http://ajw.asahi.com/article/asia/korean_peninsula/AJ201211240055.

³¹ Albright, Brannan, Kelley, and Scheel Stricker, "Burma: a Nuclear Wannabe, Suspicious Links to North Korea and High Tech Procurements to Enigmatic Facilities," 4.

IAEA, Robert Kelley, studied Sai Thein Win's information. He concluded that "analysis only leads to one conclusion: this technology is only for nuclear weapons and not for civilian use or nuclear power."³² Other well-respected international organizations have also studied these defector reports. The Institute for Science and International Security (ISIS), which monitors Myanmar's alleged nuclear actions, came to different conclusions than Robert Kelley. Their experts argued that the evidence did not conclusively determine that Myanmar was pursuing a nuclear weapon.³³ ISIS experts have reached similar conclusions regarding other defector reports. They did however acknowledge that Myanmar and North Korea are secretly cooperating in nuclear procurements and advocated that Myanmar's alleged nuclear activities be more closely scrutinized.³⁴ When one more closely examines Myanmar's actions since signing the Additional Protocols, nuclear weaponization indicators continue to surface.

Myanmar's Lack of Progress Since Signing the Additional Protocols

With one year already passed since Myanmar's signing of the IAEA Additional Protocols, Myanmar should have executed some confidence building measures by this time. Such measures would have demonstrated their commitment to follow through on their IAEA agreements. Their inaction and no clear indicators of any plan to act reinforce the belief that the Myanmar military does not intend to comply with its nation's nuclear nonproliferation agreements. The United

³² Robert Kelley and Ali Fowle, "Nuclear Related Activities in Burma," *Democratic Voice of Burma*, 25 May 2010, accessed 10 October 2014, <https://www.dvb.no/uncatergorized/nuclear-expert/9263>, 2.

³³ Albright and Walrond, "Technical Note: Revisiting Bomb Reactors in Burma and an Alleged Burmese Nuclear Weapons Program," 4.

³⁴ Albright, Brannan, Kelley, and Scheel Stricker, "Burma: a Nuclear Wannabe, Suspicious Links to North Korea and High Tech Procurements to Enigmatic Facilities," 1.

States and the International Community were optimistic of Myanmar's direction after they signed the Additional Protocols. This optimism will soon fade to the reality that Myanmar's military does not intend to abide by the Additional Protocols and, as a result, will destabilize the region. Multiple examples exist over the past year validating no change in Myanmar's military intentions to develop a nuclear weapon.

Following the signing of the Additional Protocols, President Thein Sein committed to signing the IAEA Small Quantity Protocol (SQP) in 2014.³⁵ However, Myanmar's Department of Atomic Energy representatives to the First Myanmar-US/UK Nonproliferation Dialogue conference in February 2014 delivered a different message. They stated that adopting the SQP was not on the Myanmar priority list and that their current focus was on getting the AP ratified via domestic legislation.³⁶ This backpedaling comment is another example of the military not complying with political leader commitments. When the Deputy Minister of the Ministry of Science and Technology made his statement at the 58th IAEA General Conference in September 2014, he did not refer to the SQP.³⁷ As 2014 draws to a close, there are no indicators of Myanmar adopting the SQP this year.

Myanmar has also failed to take any confidence-building measures since signing the APs. Myanmar's representatives to the First Myanmar-US/UK Nonproliferation Dialogue conference

³⁵ US Department of State Bureau of Arms Control, Verification and Compliance, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, 21.

³⁶ Ralph Cossa, Brad Glosserman, and David Santoro, "Myanmar and the Nonproliferation Regime: Sharing Perspectives: A Conference Report of the First Myanmar-US/UK Nonproliferation Dialogue," (Honolulu: Center for Strategic and International Studies (CSIS), 2014), accessed 01 September 2014, ProQuest Central (1539295619), 4.

³⁷ Myat, (address, 58th Regular Session of the IAEA General Conference).

stated that they believed Myanmar's signing of the AP was an adequate demonstration of transparency. They were not planning any other actions to build other nations' confidence in their commitment to nuclear nonproliferation.³⁸ Despite US and UK coaching efforts, no new indicators of Myanmar's intent to execute any confidence-building measure such as allowing access to suspected nuclear sites prior to AP ratification have occurred. These confidence building measures are important because the actual ratification of the APs could take years. The US should not have to wait that long to confirm Myanmar's true nuclear intentions. If one is to believe that Myanmar does not have a nuclear weapon program under development, Myanmar should open the doors to their suspect military factories now and put to rest these suspicions. Myanmar's failure to seize such an opportunity and dissuade their doubters only strengthens the argument that they do not intend to cease their secret nuclear weapon program.

Recent media reports of a secret military chemical weapon site and Myanmar's subsequent actions also reinforce the belief that Myanmar will never allow IAEA inspectors to tour their many suspect facilities. In February 2014, Myanmar officials arrested five Myanmar reporters from the *Unity Journal*, a weekly publication in Myanmar, for violating the state secrets act. They had reported about the military's evicting a local village to expand the security perimeter around a secret military compound. The article stated that the locals believe the military makes chemical weapons at the compound. Some local villagers also stated that they had seen rockets there. One cannot ascertain the veracity of the local villagers' statements. What is clear, based on Myanmar's court sentencing the reporters to over seven years in jail, is that

³⁸ Cossa, Glosserman, and Santoro, "Myanmar and the Nonproliferation Regime: Sharing Perspectives: A Conference Report of the First Myanmar-US/UK Nonproliferation Dialogue," 6.

Myanmar still has a long way to go to becoming an open democratic society.³⁹ Given the military response to this report, it becomes more likely to conclude that Myanmar's military is stalling, and never intends to open their suspect sites to IAEA inspectors.

Reading Myanmar's Signals Wrong?

The lessons of last decade's Iraq War ring clearly. A nation must proceed cautiously when making weapons of mass destruction accusations against another nation. The July 2014 Department of State "Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitment" report stated "US confidence in Burma's peaceful intentions regarding its nuclear activities continued to grow in 2013...."⁴⁰ One can assume that the US State Department based this conclusion on inputs from classified Intelligence reports as well. Though not doubting the genuineness of the statement, one must look at all US government actions to comprehend the United States' position fully. Also in 2013 the US Treasury Department sanctioned Myanmar's DDI, its Director, an assistant, and three Myanmar military procurement companies for arms trading with North Korea in violation of UNSCR 1874. The nature of that arms trading has been tied to dual-use material as detailed earlier.⁴¹ The US is attempting to walk a delicate line of not sanctioning the government of Myanmar because it wants to encourage democracy's progress while also acknowledging it must still rebuke the

³⁹ Jeffrey Lewis and Catherine Dill, "Military, Industrial and COMPLEX Myanmar Construction Casts Doubt on Junta's Pivot Toward Democracy," *Journal - Gazette*, 16 May 2014, accessed 01 October 2014, ProQuest Central (1525131607), 3.

⁴⁰ US Department of State Bureau of Arms Control, Verification and Compliance, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, 21.

⁴¹ Angus Watson, "Burma's VP Meets N. Korean Envoy in Naypyidaw," *Democratic Voice of Burma*, 19 February 2014, accessed 03 October 2014, ProQuest Central (1499654255).

military's DDI and its executing agents. One could assume that should democracy fully succumb to military rule, the US government approach to addressing the issue would change.

The second and final counterargument worth noting is that Myanmar just needs time to work through the details of the AP so that they can ratify it, and then they will grant IAEA inspectors access. In analyzing the time between signing and ratifying the AP by the 111 nations that have signed and ratified APs, the average amount of time is just under three years. The rebuttal to this argument is twofold. First, a further analysis of IAEA data shows that 54 nations ratified their APs in a year or less. Though Myanmar is not behind in their ratification, there are ample examples of nations that have ratified their APs in less time than Myanmar has already taken.⁴² Additionally, basing progress on how long it takes Myanmar to ratify the APs is the wrong benchmark. One can assume it will take the fledgling democracy of Myanmar a long time to ratify the APs. What should not take a long time though is Myanmar's taking the incremental step of a confidence-building measure such as allowing IAEA inspectors to visit suspect sites or answering the requested IAEA questions.

Recommendations

Given the compelling evidence regarding Myanmar's true nuclear intentions, the United States and IAEA should adjust their approach to Myanmar in 2015. Next year will be a pivotal year as Myanmar prepares for national elections. The world anxiously waits to see if democracy can grow further and break through the glass ceiling the military created constitution has imposed. Several recommendations if put into action may compel Myanmar to cease any efforts

⁴² International Atomic Energy Agency, "Conclusion of Additional Protocols: Status as of 6 August 2014," accessed 01 October 2014, https://www.iaea.org/safeguards/documents/AP_status_list.pdf.

to build a nuclear weapon. The recommendations fall into two broad categories of diplomatic and military related measures.

From a diplomatic standpoint, a senior US representative should routinely inform Myanmar's senior political leadership that United States' support is contingent on Myanmar's true democratic progress. The civilian government cannot be a mask behind which the military still continues to control the country. The United States has not lifted all sanctions and can impose the previous sanctions once again if necessary. The United States must clearly articulate to Myanmar civilian and military senior leadership that there is no grace period for past purchase obligations from North Korea. Any arms shipment, regardless of when initially coordinated, is a violation of UNSCR 1874. Any future violation may result in the US imposing further sanctions on not just individuals and businesses but the country as a whole.

One can logically conclude that Myanmar will not sign the SQP in the closing weeks of 2014 as they had previously committed. Given that conclusion and their lack of any confidence-building measures since signing the APs, the United States and IAEA must increase the diplomatic pressure on Myanmar. The US and IAEA must compel Myanmar to allow IAEA inspectors to visit suspected nuclear sites within the next six months. It is both disappointing and concerning that Myanmar has not initiated such an action. They should see it as an opportunity to silence Myanmar's doubters. Former IAEA inspector and director, Robert Kelley, advocated this confidence-building measure and stated that such inspections would only take several weeks to

coordinate.⁴³ Pressure to allow inspections as soon as possible may dissuade Myanmar's military from further pursuance of a nuclear weapon program and thus increase regional stability.

The United States, in conjunction with IAEA subject matter experts, should increase its assistance to Myanmar in ratifying the APs. The February 2014 Myanmar and US/UK Nonproliferation Dialogue was a positive first step. Increased action could accelerate the ratification of the AP and may lead to sooner IAEA inspections. Inspection results would most likely confirm Myanmar's true nuclear intention.

The final recommendation concerns military engagement. Until Myanmar's true nuclear intentions are clear, and Myanmar is undeniably committed to transparent nuclear nonproliferation, the US military should limit its engagement with the Myanmar military to only dialogue. The US military should provide no training or resources to Myanmar. The legitimacy of the US military efforts could be compromised if either the International Community or the US concludes that Myanmar continues to pursue a nuclear weapon. Dialogue should occur. It is always better to have communication channels open rather than closed. The PACOM CDR, or his designated representative, should attempt to influence Senior General Min Aung Hlaing to not wait until AP ratification and allow IAEA inspectors access to requested sites within the next six months. Dialogue must stress the importance of confidence-building measures while awaiting the AP's ratification. The PACOM commander should also inform Senior General Min Aung Hlaing that future US military training and resource opportunities are contingent upon

⁴³ Robert Kelley, "Nuclear Burma - a chance to cut the red tape," *Democratic Voice of Burma*, 22 September 2013, accessed 19 September 2014, <http://www.dvb.no/analysis/nuclear-burma-a-chance-to-cut-the-red-tape-myanmar-iaea-atomic-energy/32677>, 4.

Myanmar's ratification of the APs and allowing IAEA inspectors access to suspected WMD sites.

Conclusion

One cannot understate the importance and relevance of this topic to regional and world stability. President Obama has personally addressed the topic, and his influence was decisive to Myanmar's signing the IAEA Additional Protocols last year. President Obama stated on 19 November 2012 during his visit to Myanmar, "...I think we share an interest in trying to curb the proliferation of weapons of mass destruction. And that is obviously a significant security concern for the United States, but also the world."⁴⁴

The United States cannot definitively conclude Myanmar's true nuclear intentions based off the analysis of open source information. However, this analysis should compel the United States to assume Myanmar's military intentions are to continue to attempt to develop a nuclear weapon. This research paper is limited to unclassified information. A more thorough analysis, which includes both open and classified information, is necessary to either confirm or deny this thesis. This research can contribute to that detailed analysis.

Myanmar does not currently have a nuclear weapon capability, and nor it will anytime soon. However, the unbroken trend of the military's procurements and suspect nuclear-related actions demonstrates that the military is still attempting to develop a nuclear weapon. Continuing to apply steady pressure to Myanmar concerning nuclear nonproliferation progress must be a priority for the US Embassy in Myanmar and the PACOM headquarters. If they do not,

⁴⁴ Barack H. Obama, "Remarks Following a Meeting with President Thein Sein of Burma in Rangoon, Burma," *Daily Compilation of Presidential Documents*, 19 November 2012, accessed 06 October 2014, ProQuest Central (1351768815), 2.

Myanmar's military may take additional measures to sidestep its country's nuclear nonproliferation commitments and further destabilize the region.

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Appendix A: Myanmar-North Korea Suspicious Nuclear Related Actions	
DATE	INCIDENT
November 2008	Senior General Shwe Mann conducts state visit to North Korea. Visits with Jon Byong Ho (North Korea’s “proliferator in chief”), views the ballistic missiles at the NK main missile production factory (unprecedented access that only Syria, Egypt, and Iran have had in past), signs a historic memorandum of understanding with North Korea on defense cooperation. ^a
2008	Myanmar receives a shipment of dual-use cylindrical grinders from Japan that were procured on behalf of a North Korea front company. The items can be used to make magnets for a centrifuge-based uranium enrichment program or for missile system gyroscopes. ^h
2009	The North Korean ship <i>Kang Nam I</i> enroute to Myanmar turns back after the US Navy trails it; the US asserted it had missiles or missile related technology on board. ^b
July 2010	US State Department Bureau of Verification, Compliance and Implementation reports US concern for Myanmar developing a nuclear program with assistance from North Korea in establishing a nuclear research center. ^c
2011	The North Korean ship M/V Light enroute to Myanmar turns back to avoid US Navy boarding the vessel; the US asserted it had missiles or missile related technology on board. ^b
August 2012	Japan seizes “50 metal pipes and 15 high specification aluminum alloy bars” from North Korea that could be used in either a nuclear or missile program. ^b
2012	President Thein Sein states Myanmar will no longer purchase arms from North Korea during visit to South Korea. ^d
2012	At least 30 North Korean experts are known to work in a DDI factory compound where missile research and development occur, demonstrating North Korea’s technical assistance in weapons development. ^e
July 2012	US Treasury sanctions DDI for arms trading with North Korea. ^f
November 2012	DDI Director, Lieutenant General Thein Htay, leads a Myanmar delegation to Beijing, meets with North Korea officials and signs an agreement to expand bilateral military ties. ^e
2013	The Director General, Than, Tun of the military run firm Union of Myanmar Economic Holdings is cited by North Korea state news stating that Myanmar trade with North Korea will continue despite efforts of the US to cease it. ^d

DATE	INCIDENT
2013	US Treasury blacklists the Director of the DDI, Lieutenant General Thein Htay, a LTC in the DDI, and three Myanmar tied business firms for arms trading with North Korea. ^d
February 2014	Myanmar's <i>Unity Journal</i> weekly publication publishes story about the village of Lebinaing being razed so that the military factory at Pauk can expand. Locals tell reporters that site is used for chemical weapons and have seen rockets at the site. Myanmar authorities arrested the reporters and reporters are currently serving a seven year sentence for violating rules for reporting on military activities and locations. ^g
Table Footnotes	<ul style="list-style-type: none"> a. Lewis, "Does Burma Still Have Nuclear Dreams?" 2. b. Lele, "NUCLEAR MYANMAR DORMANCY SHOULD NOT BE TAKEN FOR GRANTED," 49. c. Selth, "Myanmar's Nuclear Ambitions," 7. d. Watson, "Burma's VP Meets N Korean Envoy in Naypyidaw." e. "TREASURY DESIGNATES BURMESE COMPANIES AND AN INDIVIDUAL WITH TIES TO THE DIRECTORATE OF DEFENSE INDUSTRIES." f. Nan Tin Htwe, "Uncertainty over Thein Htay sanction," <i>Myanmar Times</i>, 8 July 2013, accessed 5 October 2014, http://www.mmtimes.com/index.php/national-news/7405-uncertainty-over-thein-htay-sanction.html. g. Lewis and Dill, "Military, Industrial and COMPLEX Myanmar Construction Casts Doubt on Junta's Pivot Toward Democracy," Section: "Village, story gone Section." h. Nuclear Threat Initiative, "Myanmar country profile," accessed 08 October 2014, http://www.nti.org/country-profiles/myanmar/, 3-4.