INTRODUCTION

How Dark Might East Asia's Nuclear Future Be?

Long considered unlikely, the prospect of South Korea and Japan getting nuclear weapons and China and North Korea significantly ramping up their arsenals has become the next big worry. This June, CIA Director John Brennan testified that nuclear proliferation was "a blinking red light" and spotlighted North Korea's nuclear misbehavior as a key concern. His testimony came only weeks after a *The New York Times* interview of Donald Trump in which the Republican presidential hopeful emphasized the inevitability and possible benefits of Japan and South Korea going nuclear. Since then, the question of whether or not it is in Washington's interest to push nonproliferation in East Asia has been a hot topic in and outside the Beltway.

The debate could not be more timely—decisions will be made over the next 36 months in Tokyo, Beijing, Pyongyang, Seoul, Washington, and Paris that could easily lock East Asia into a fissile material arms race. Japan already has over 2,000 weapons' worth of nuclear explosive plutonium stored on its soil. In addition, it plans to open a large reprocessing plant late in 2018, which is designed to chemically separate enough plutonium from Japanese civilian power reactor fuel to make roughly 1,500 nuclear weapons' worth of plutonium a year.³ China, meanwhile, continues to modernize and expand its nuclear weapons arsenal and is currently negotiating with the French government-owned firm EDF-AREVA to buy a reprocessing plant similar in size to the Japanese one.⁴

All of this has gone down poorly in Seoul: Officials there have made it clear that when it comes to dangerous nuclear activities, South Korea should be allowed to do whatever Japan does. Then, there is North Korea, whose own provocative nuclear misbehavior is yet another worrisome driver of tensions in a region already ripe with historical and territorial disputes. Unless proper actions are taken now, a much more nuclearized East Asia is likely.

How tolerable a more nuclear-armed East Asia might be, of course, depends on just what it would look like. This brief volume is dedicated to trying to find out. Each section offers detailed projections of what the future holds for a more nuclear-armed China, Japan, North Korea, and South Korea. None are predictions. Instead, their purpose is to encourage deeper debate about the security implications of where we

^{1.} Ellen Mitchell, "CIA chief outlines 'blinking red lights' for White House hopefuls," *Politico*, June 16, 2016, available at http://www.politico.com/story/2016/06/john-brennan-trump-clinton-224434.

^{2.} Maggie Haberman and David E. Sanger, "Transcript: Donald Trump Expounds on His Foreign Policy Views," *The New York Times*, March 26, 2016, available at http://www.nytimes.com/2016/03/27/us/politics/donald-trump-transcript.html.

^{3.} Henry Sokolski, *Underestimated: Our Not So Peaceful Nuclear Future*, Arlington, VA: NPEC, 2016, pp. 71-72 available at http://www.npolicy.org/books/Underestimated/2edition.pdf.

^{4. &}quot;Chinese reprocessing plant to start up in 2030," *World Nuclear News*, September 24, 2015, available at http://www.world-nuclear-news.org/WR-Chinese-reprocessing-plant-to-start-up-in-2030-2409155.html.

are headed.

In the first chapter, Ian Easton, a research fellow at the Project 2049 Institute, presents three different possible nuclear futures for Japan: Tokyo acquiring a small arsenal that would support U.S. nuclear targeting plans, Japan building a much larger independent force, and Japan remaining nonnuclear but investing heavily in active and passive defenses to undermine North Korea's and China's nuclear strategies. Easton projects costs, deployment numbers, target sets, and offers explanations of why Japan might take these courses of action.

Mark Stokes, Executive Director of the Project 2049 Institute, then describes why and how China might greatly expand its nuclear arsenal. A key driver, independent of current regional tensions, he argues, is China's move toward more land and sea-based mobile nuclear systems that demand greater delegation of launch authority.

This then brings us to the case of North Korea. As Shane Smith, Senior Research Fellow at the National Defense University's Center for the Study of Weapons of Mass Destruction, notes, Pyongyang has a number of reasons to upgrade its arsenal. All of them require more and better nuclear weapons, which North Korea is now developing.

South Korea is considering its options. Late in July, Representative Won Yoo-chul of South Korea's ruling Saenuri Party and a staunch supporter of President Park Geun-hye, announced his formation of a parliamentary working group to create a consensus on when and how Seoul should acquire nuclear weapons. His concern is that the U.S. may abandon South Korea if Donald Trump becomes president, giving Seoul no other choice but to get its own bomb. How South Korea might do this is examined by Charles D. Ferguson, President of the Federation of American Scientists. In his chapter, Ferguson details how South Korea could readily exploit its civilian nuclear infrastructure to make scores of nuclear weapons relatively quickly.

In a separate concluding chapter, I offer a series of graphics originally presented at the RAND Corporation detailing how Japan, South Korea, and China could use their civilian nuclear sectors to make more bombs. The numbers of bombs that could be made are both large and stunning.

Will East Asia go far more nuclear than it already has? Much will depend on how reliable the U.S. is seen as a nuclear ally to Japan and South Korea. Will France seal a deal to sell China a large reprocessing plant? Yet another question is when might Japan open up its planned reprocessing plant and what reaction this might prompt by South Korea. All of this is in play. What ultimately will happen is unclear. What is not is what is at stake. That much this volume makes clear.

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^{5.} Jun Ji-hye, "Pro-Park lawmaker planning forum for nuclear armament," *The Korea Times*, July 25, 2016, available at http://www.koreatimes.co.kr/www/news/nation/2016/07/116_210230.html.