

## US can carry out a decapitating first strike if we get - PGS capabilities — no retaliation

Fiona S. Cunningham, Ph.D. candidate in the Department of Political Science and member of the Security Studies Program at the Massachusetts Institute of Technology; M. Taylor Fravel, Associate Professor of Political Science and member of the Security Studies Program at the Massachusetts Institute of Technology, 2015, "Assuring Assured Retaliation: China's Nuclear Posture and U.S.-China Strategic Stability", *International Security*, Vol 40, No 2, pp. – 7-50, [http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC\\_a\\_00215](http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC_a_00215)

Whether China will abandon its long-standing nuclear strategy of assured retaliation for a more offensive strategy is a critical factor in U.S.-China strategic stability and the future of East Asian security. Since testing its first nuclear device in 1964, China has sought to develop a nuclear force that could survive a first strike and then inflict unacceptable damage on an adversary. The goal of such a force has been limited to deterring nuclear coercion and the use of nuclear weapons against China. With the deployment of road-mobile, solid-fueled intercontinental ballistic missiles (ICBMs) in the mid-2000s, China appeared to be on the cusp of achieving this goal. Advances in U.S. strategic capabilities, however, could weaken China's deterrent. Although President Barack Obama emphasized strategic stability with China and Russia during his first term, the United States has continued the George W. Bush administration's pursuit of strategic superiority through the development of a "new triad." **The United States is maintaining a prominent role for nuclear weapons in its strategic posture, strengthening the submarine, land-based missile, and bomber delivery systems that make up the "old" nuclear triad. At the same time, it is developing both its missile defenses and counterforce capabilities, which would include the use of conventional weapons, such as those associated with the Conventional Prompt Global Strike (CPGS) program.<sup>1</sup> Taken together, these U.S. capabilities could reduce or eliminate China's ability to launch a retaliatory strike.** As a result, they may create strong pressures on China to expand its force structure to ensure survivability under its existing strategy or abandon assured retaliation for a first-use posture, such as launch-on-warning, or a limited warfighting strategy envisaging attacks on an adversary's nuclear arsenal or conventional forces.<sup>2</sup> Many analysts expect that China will abandon its current nuclear strategy. In 2006 Keir Lieber and Daryl Press predicted that "growing U.S. capabilities will pressure Russia and China to reduce the peacetime vulnerability of their forces" through "logical" precautionary steps, including larger nuclear forces coupled with more offensive postures.<sup>3</sup> Likewise, highlighting the vulnerability of second-strike forces, Austin Long and Brendan Green conclude that "if China is like past rising great powers, it will not accept decisive nuclear inferiority in perpetuity."<sup>4</sup> China's restrained nuclear posture, compared to the rapid growth in its conventional missile forces and other conventional capabilities, demonstrates that China's rise alone is insufficient to prompt a change in Chinese nuclear strategy. Historically, a similar U.S. attempt to gain strategic nuclear primacy in the early Cold War prompted the Soviet Union to abandon a more restrained nuclear posture and engage in an arms race with the United States.<sup>5</sup> To assess whether China will alter its approach to nuclear strategy, this article examines Chinese views of U.S. nuclear weapons and strategy. In particular, how does China assess the threat posed by the nuclear posture of the United States? How will China respond to U.S. development of missile defense and conventional long-range strike capabilities? The answers to these questions are important for several reasons. First, the nuclear posture that China adopts will shape the prospects for arms race stability, which could influence the strategic calculations of other nuclear powers in the region, as well as those of the United States, and could influence perceptions of Chinese intentions. Second, the nuclear posture that China adopts will play a central role in U.S.-China crisis stability. If China maintains an assured retaliation posture with a strict no-first-use pledge, rejecting a first-use strategy, it would enhance crisis stability by requiring the United States to use nuclear weapons first. Third, answers to the questions above will provide an updated and comprehensive summary of Chinese views of the U.S. nuclear posture and the implications of these views for strategic stability. Recent scholarship has examined various elements of Chinese views, such as China's reaction to the United States' 2010 Nuclear Posture Review and U.S. missile defense developments, but they have not examined the interaction of Chinese views of these different elements and their implications for China's own nuclear strategy and strategic stability with the United States.<sup>6</sup> Our analysis of Chinese views on the strategic posture of the United States yields two important findings. **First, China will not abandon its strategy of assured retaliation in response to an increasingly clear U.S. commitment to strategic primacy.<sup>7</sup> China currently believes that it is both possible and desirable to maintain assured retaliation, despite U.S. pursuit of the capabilities necessary to achieve strategic primacy.** China has retained its no-first-use policy while modernizing and modestly expanding its nuclear forces. Instead, China will alter how it implements its strategy of assured retaliation, increasing the capabilities for the "assuredness" of retaliation by increasing the number of missiles and warheads that can strike the continental United States. China is also allowing limited ambiguity over the application of its no-first-use policy, especially if the United States were to use conventional weapons to attack Chinese nuclear weapons or their supporting infrastructure.

**Plan delays the war until Chinese development of a second strike capability – causes a conventional US – China war to escalate to full scale nuclear war. Both China and the US would be willing to use nukes and neither side could effectively first strike**

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China and the United States face an increasing number of issues over which a serious crisis could occur. In addition to Taiwan, which could become a more prominent source of tensions than it has been since the election of Ma Ying-jeou in 2008, other potential flashpoints include maritime disputes in East Asia that involve U.S. treaty allies or security partners as well as frictions over the freedom of navigation of U.S. military vessels within what China views as waters under its jurisdiction. The odds of escalation are enhanced because both sides may underestimate the interests at stake for the other and, because the status quo is not clearly defined, they may believe that they are acting defensively while the other is acting offensively revisionist.<sup>110</sup> Although recent analyses of U.S.-China security dynamics highlight many of the same factors contributing to crisis instability, they reach somewhat different conclusions about the effect of China’s secure second-strike capability and U.S.-China mutual vulnerability on the potential for escalation to the nuclear level in a crisis. In a recent article on the **role of China’s secure second-strike** and coercive leverage, Thomas Christensen draws attention to the danger of inadvertent escalation in a crisis between the United States and China. In particular, Christensen challenges the optimistic view that China’s secure second-strike capability will prevent escalation to the strategic nuclear level because each side would be able to impose unacceptable damage on the other after absorbing a first strike.<sup>111</sup> Drawing on the Cold War–era scholarship of Robert Jervis and Thomas Schelling, Christensen suggests that **a conventionally weaker state with a secure second-strike capability could create a “threat that leaves something to chance,” whereby any conventional conflict could ultimately escalate to strategic nuclear war**.<sup>112</sup> The lack of a clear firebreak between conventional and nuclear operations enhances this risk of *nuclear escalation*. Conventionally weaker states may unintentionally increase the threat that leaves something to chance if their nuclear and conventional forces are integrated, and “fighting can become blurred between conventional and nuclear war.”<sup>113</sup> In a possible crisis between the United States and China, Christensen identifies how inadvertent escalation might occur. He suggests **that China could be bolder in a conventional crisis** with the United States because it believes it could counter U.S. threats of nuclear escalation.<sup>114</sup> Complicating matters, some of China’s newly developed conventional systems overlap with its nuclear ones, especially land-based ballistic missiles and their attendant command and control infrastructure but also submarines and space-based assets. If a conflict between the United States and China occurred, Christensen notes that U.S. commanders could have strong incentives to attack China’s mobile missiles and related assets to defend U.S. forces and ultimately prevail in a conflict.<sup>115</sup> **If these strikes occurred, Beijing could mistakenly view them “as a conventional attack on its nuclear retaliatory capability or as a precursor to a nuclear first strike.” As a result, “even a China that generally adheres to a No-First-Use posture might escalate to the nuclear level**.<sup>116</sup> Christensen also highlights sections from the Science of Second Artillery Campaigns to show that “China’s NFU [no-first-use] doctrine still allows for blurring of the firebreak between conventional and nuclear warfare.”<sup>117</sup> The book, for example, indicates that China’s nuclear forces create a means “by which to level the playing field with a stronger adversary” and suggests that China

could lower its “nuclear deterrence threshold” under certain conditions, including “to compel the enemy to stop its war of invasion.”<sup>118</sup>

## **PGS decaps China Russia arsenals, and forward deployment means we have unbreakable BMD for every trajectory**

Trunews 4/27/2017 [Trunews, “U.S. missile shield to cover nuclear strike from Russia”, Trunews, <<http://www.trunews.com/article/u.s.-missile-shield-to-cover-nuclear-strike-from-russia>>] //CJC

There is an obvious link between **Washington’s prompt global strike initiative**, which seeks capability to engage “any targets anywhere in the world within one hour of the decision,” and the deployment of missile launch systems in Europe and aboard naval vessels across the globe, Lt. Gen. Viktor Poznikhir said at a news briefing on Wednesday. **“The presence of US missile defense bases in Europe, missile defense vessels in seas and oceans close to Russia creates a powerful covert strike component for conducting a sudden nuclear missile strike against the Russian Federation,”** Poznikhir explained. While the US keeps claiming that its missile defenses are seeking to mitigate threats from rogue states, **the results of computer simulations confirm that the Pentagon’s installations are directed against Russia and China**, according to Poznikhir. **American missile attack warning systems, he said, cover all possible trajectories of Russian ballistic missiles flying toward the United States**, and are only expected to get more advanced as new low-orbit satellites complement the existing radar systems. **“Applying sudden disarming strikes targeting Russian or Chinese strategic nuclear forces** significantly increases the efficiency of the US missile defense system,” Poznikhir added.

## **China Russia developing hypersonics now — can get through our missile defenses**

Gertz 2017 [Bill Gertz at Washington Times, “Pentagon studies ways to counter hypersonic missile threat from China, Russia”, *Washington Times*, <<http://www.washingtontimes.com/news/2017/feb/22/china-russia-hypersonic-missile-threat-under-revie/>>] //CJC

**Hypersonic missiles are under rapid development in China and Russia as a way to penetrate advanced air and missile defenses** such as those developed by the Army and Navy. A major problem for current U.S. missile defenses is that all were designed from the ground up to target missiles with predictable and unchanging trajectories. **China’s DF-ZF hypersonic glide vehicle has been tested at least seven times, and Russia’s Yu-71 hypersonic strike weapon also has been tested several times.** The gliders are launched atop ballistic missiles and travel along the edge of the atmosphere at speeds from **Mach 5 to Mach 10 —** 3,800 to 7,600 miles per hour. **The maneuvering strike vehicles can defeat all current U.S.**

missile defenses, including ground-based interceptors in California and Alaska, sea-based Aegis anti-missile systems and the land-based Terminal High Altitude Area Defense, or THAAD.

## **PGS can be used to launch decap strike on Russia**

**Weitz 2008** [Richard Weitz at World Politics Review, "Global Insights: Prompt Global Strike Remains Strategically Problematic", *World Politics Review*,

<<http://www.worldpoliticsreview.com/articles/3075/global-insights-prompt-global-strike-remains-strategically-problematic>>] //CJC

A few Russian military strategists have also expressed interest in exploring conventional strategic strike options. Russian government officials, however, have long attacked the concept of using long-range ballistic missiles, normally equipped with nuclear weapons, for strikes with conventional or even very low-yield nuclear weapons ("mini-nukes"). In a Sept. 11 address, for instance, Russian Foreign Minister Sergey Lavrov denounced the **United States** for its deployment of missile defenses in much of the world, its alleged militarization of outer space, and its "doctrine of so called lightning-like **global strikes**" that entailed "working at full steam on a project to use non-nuclear warheads on strategic carriers." Russian experts claim that Russia's early warning systems could easily mistake the launch of an American ICBM or SLBM, even if equipped with conventional warheads, as a nuclear strike against Russia. In retaliation, the Russian government would launch nuclear missiles at the United States before the presumed American warheads could reach Russian territory and destroy the Russian ICBMs in their silos. Russian strategists also argue that **the United States could employ even confirmed conventionally armed strategic weapons to conduct a devastating attack on key Russian targets, such as in strikes against Russia's nuclear command-and-control networks. Such an attempted "decapitation" strike would seek to disrupt Moscow's ability to organize a coherent retaliatory strike by rendering the elements of Russia's strategic command unable to communicate with their heads in Moscow or with other components.** More recently, some Russian analysts have expressed concern that, if not constrained by formal arms control agreements, the United States could simply load some of its nuclear warheads in storage on conventionally armed strategic delivery vehicles and convert them into nuclear strike weapons. Vladimir Evseev, senior researcher at the Russian Academy of Science's Institute of World Economics and International Relations, commented that, "Converting elements of strategic nuclear forces into non-nuclear antiterrorist forces does not exclude their being converted back. . . . [T]he U.S. will amass a reverse potential that could be rapidly converted into strategic nuclear forces." Although American advocates of **prompt global strike** have replied that the United States could agree to adopt operational practices (e.g., providing Russia with advanced notice of any launch or basing conventionally armed missiles in different locations from strategic weapons) to minimize the risks of such confusion, Russian diplomats have refused to negotiate such limitations.

## **PGS destroys all of Russia's nukes in one minute**

**Zuesse 2014** [Eric Zuesse is an author and investigative historian, "Indications that the U.S. Is Planning a Nuclear Attack Against Russia", *Washingtons Blog*,

<<http://www.washingtonsblog.com/2014/06/indications-u-s-planning-nuclear-attack-russia.html>>] //CJC

Moreover, Obama isn't only beefing up our first-strike nuclear capability, but is also building something new, called "**Prompt Global Strike**," to supplement that nuclear force, by means of "**a precision conventional weapon strike**" that, if launched against Russia from next-door Ukraine, **could wipe out Russia's nuclear weapons within just a minute or so**. That might be a fallback position, for Obama, in case the EU's leaders (other than Netherlands and perhaps one or two others) might happen to decide that they won't participate in our planned nuclear invasion of Russia.

**War with China is inevitable – historical analysis shows that conflict is increasingly likely**

Allison 15 (Graham, American political scientist and professor at the John F. Kennedy School of Government at Harvard, 9/24/15, “The Thucydides Trap: Are the U.S. and China Headed for War?,” The Atlantic, <http://www.theatlantic.com/international/archive/2015/09/united-states-china-war-thucydides-trap/406756/>)

When Barack Obama meets this week with Xi Jinping during the Chinese president’s first state visit to America, one item probably won’t be on their agenda: the *possibility* that the *United States and China could find themselves at war in the next decade*. In policy circles, this appears as unlikely as it would be unwise. And yet 100 years on, World War I offers a sobering reminder of man’s capacity for folly. When we say that war is “inconceivable,” is this a statement about what is possible in the world—or only about what our limited minds can conceive? In 1914, few could imagine slaughter on a scale that demanded a new category: world war. When war ended four years later, Europe lay in ruins: the kaiser gone, the Austro-Hungarian Empire dissolved, the Russian tsar overthrown by the Bolsheviks, France bled for a generation, and England shorn of its youth and treasure. A millennium in which Europe had been the political center of the world came to a crashing halt. The *defining question* about global order for this generation *is whether China and the United States can escape Thucydides’s Trap*. The Greek historian’s metaphor reminds us of the attendant dangers *when a rising power rivals a ruling power*—as Athens challenged Sparta in ancient Greece, or as Germany did Britain a century ago. Most such contests have ended badly, often for both nations, a team of mine at the Harvard Belfer Center for Science and International Affairs has concluded after analyzing the historical record. In **12 of 16 cases over the past 500 years**, the *result was war*. When the parties avoided war, it required huge, painful adjustments in attitudes and actions on the part not just of the challenger but also the challenged. *Based on the current trajectory, war between the United States and China* in the decades ahead is not just possible, but *much more likely than recognized at the moment*. Indeed, judging by the historical record, *war is more likely than not*. Moreover, current underestimations and misapprehensions of the hazards inherent in the U.S.-China relationship contribute greatly to those hazards. A risk associated with Thucydides’s Trap is that *business as usual*—not just an unexpected, extraordinary event—*can trigger large-scale conflict*. When a rising power is threatening to displace a ruling power, standard crises that would otherwise be contained, like the assassination of an archduke in 1914, can initiate a cascade of reactions that, in turn, produce outcomes none of the parties would otherwise have chosen.

**War is inevitable – China will want to be the next global super power – conflict now ensures victory while continuation of the squo decimates heg**

Valencia 14 (Mark, maritime policy analyst, political commentator and consultant focused on Asia, is an adjunct senior scholar at the National Institute for South China Sea Studies in Hainan, China, 9/1/14, “China, U.S. moving closer to viewing war as inevitable,” The Japan Times, <http://www.japantimes.co.jp/opinion/2014/09/01/commentary/world-commentary/china-u-s-moving-closer-to-viewing-war-as-inevitable/#.V36nr5MrJp8>)

KANE OHE, HAWAII – The Aug. 19 dangerous encounter between a U.S. Navy surveillance plane and a Chinese fighter jet over the South China Sea was in the Pentagon’s words “certainly not in keeping with the kind of military-to-military relations” the United States seeks with China. Political relations are tenuous as well. **Many analysts** in both the U.S. and China *have warned of a “tipping point” in China-U.S. relations beyond which the two conclude that conflict is unavoidable* and begin preparing for it in earnest while trying to hide their true intentions. This is different from hedging in that there is no easy way back. Beyond the tipping point the national mind-set and policy decisions inexorably tilt and then flow toward conflict. *Such a clash of titans would not be a new phenomenon*. In classic realist theory, established powers strive to preserve the status quo that assures their position at the top of the hierarchy and view emerging powers as potential threats. Rising powers feel constrained and strive to stretch the sinews of the international system. They fear that the dominant power will try to snuff them out before they become an existential threat. Thucydides described this “natural” process regarding Athens and Sparta as a combination of “rise” and fear — which inevitably leads to war. Today this is known as the “Thucydides trap.” The international relations question of our age is: Can China and the U.S. avoid it? This may sound like Chicken Little warning that “the sky is falling.” But the *situation really is quite bad and growing worse by*

*the day.* It is now clear that China expects to play a role at “the center of the world’s political system.” It wants to be a new rule maker and an old rule breaker if it is in its national interest to do so. It wants to be an “exceptional” country like the U.S. The accommodation of such a role for China by the U.S. is what President Xi Jinping presumably meant when he proposed a “new” type of major country relationship at his Sunnylands summit with U.S. President Barack Obama in June last year. But as Ashley Tellis argues in his new book “Balancing Without Containment: An American Strategy for Managing China,” the loss of “primacy to China would fundamentally undermine the national security interests of the United States in the most comprehensive sense imaginable.” The U.S. ideational, political, cultural and economic dominance of the international arena and decision making process would slowly erode and be replaced by that of China. America would no longer be the only “exceptional country” and the envy of the world, if it ever really was. The very way of life of Americans would be diminished and disparaged in the eyes of the world. In short, we may be witnessing a fundamental U.S. foreign policy failure in East Asia. The U.S. has not been able to unify the 10-member Association of Southeast Asian Nations against China, stem China’s assertiveness or even enhance stability in the South China Sea. Its “pivot” has made the region more unstable and a cockpit of contention between it and China. Its attempts to impose an interim solution to the disputes there have so far failed. The chairman of the U.S. Joint Chiefs of Staff, Martin Dempsey, believes that *the risk of war in Asia will increase over the next 10 years as the U.S. military technological edge over China erodes.* In an even stronger indication of a change in mind-set, the U.S. Air Force is deploying more B-2 stealth bombers and advanced B-52H strategic bombers to Guam. In a clear allusion to China, a frustrated U.S. Defense Secretary Chuck Hagel warned those who violate the territorial integrity of nations by “force, coercion and intimidation” against doing so. Hagel also stated that “the United States will not look the other way when fundamental principles of the international order are being challenged.” Deep strategic thinkers like Tellis have sketched out a strategy to “manage” China’s rise. Whether by design or coincidence, pieces of this grand strategy are already being implemented. Tellis calls his strategy “balancing without containment.” Others might call it “soft containment.” He proposes that “the U.S. pursue policies that simultaneously increase China’s stake in the existing global system and raise the costs of abusing its power.” His strategy would also require supporting the states around China through increasing cooperation with them. This is already happening. According to Daniel Russell, U.S. assistant secretary of state for East Asia and the Pacific, “we joined EAS (East Asian Summit) because, as an Asia-Pacific nation, we want to be at the table for a strategic discussion about how we build and shape the institution over time.” Another element of this strategy is the enhancement of the U.S. military as a deterrent that reassures U.S. allies and convinces fence-sitters to lean toward it while dissuading China’s assertiveness toward its neighbors. The last element is to promote “the highest velocity of technical change possible across the spectrum of civilian to military endeavors” — essentially to out-create and out-think China technically and economically. This is America’s best “weapon” and the key to its dominance and survival. But *can it really out-think China with its increasingly tech-savvy 1.3 billion population?* Meanwhile, China perceives a somewhat different big and long-term picture. In its view the tectonic plates of the global international political system are inexorably shifting, and the U.S. and China are on opposite sides of the divide — and perhaps history. The U.S. is yesterday’s and today’s sole superpower, but its credibility, legitimacy and ability to impose its will are fast eroding. Indeed, America is no longer a Leviathan overseeing and ruling the global system. As one commentator puts it “The U.S. is deeply in debt; its middle class is crumbling; its industries have been hollowed out; its infrastructure is in disrepair; its education system is badly underfunded; and its social contract is in shambles.” It is also squandering blood and treasure as it tries in vain to sustain its dominance. China’s leaders believe China represents the future, not just in hard power but also in economy, culture and values. Indeed, *China’s leaders believe it is China’s destiny to regain its prominence if not pre-eminence in the region and perhaps eventually the world.*

### **Conventional Prompt Global Strike funding is insufficient now**

**Brustlein 15** (Corentin Brustlein, head of the Deterrence and Proliferation research program at the French Institute of International Relations (IFRI), researcher in the institute’s joint civil-military Defense Research Unit, and PhD in Political Science from the Jean Moulin University of Lyon, January 2015, Conventionalizing Deterrence? U.S. Prompt Strike Programs and Their Limits, Security Studies Center,

<http://www.ifri.org/sites/default/files/atoms/files/pp52brustlein.pdf>) PA

Development of **CPGS** capabilities **has run into** a series of **budgetary**, political and technological **barriers** which have mutually reinforced each other. Taken together, they help understand why progress has until now been extremely limited. These factors combined have pushed back the perspective of deploying an operational capability to the end of the decade at least<sup>40</sup>. In the first place, most U.S. projects suffer from their reliance on technologies that are not yet mature, particularly when

relying on HGVs (scramjet propulsion is another example). The requirements laid down by the Pentagon for the planned systems – strike any target on the earth with metric precision in less than one hour – are extremely ambitious. Because Congress had ruled out the only option based on relatively proven technologies (CTM program), any CPGS system development first required key advances in mastering hypersonic flight. In theory, only a hypersonic glide vehicle could combine global range, short flight time and sufficient precision, while reducing the nuclear ambiguity problem thanks to its maneuverability during the intermediate phase of flight. However, in concrete terms, achieving a mature design for a HGV with global range poses numerous difficulties, either revealed during HTV-2 testing or anticipated in the longer term: the conditions for stable gliding flight at hypersonic speeds are still poorly understood; test costs are prohibitive, and reproducing hypersonic flight conditions in an experimental environment is both difficult and expensive; shielding the payload from the extreme heat generated by highspeed endoatmospheric flight constitutes a tremendous challenge; current precision guidance systems seem inadequate for use with a HGV: the GPS signal could be disrupted by the plasma generated by atmospheric heating, while inertial measurement units would lack precision considering the extreme speed of both the vehicle and payload<sup>41</sup>. To know whether these obstacles could be overcome and explore the different potential technical options, large R&D investments sustained in the long term would be needed<sup>42</sup>. However, this kind of investments has not taken place. The first phase of significant investments was planned in 2007 and was to fund the CTM program on which the administration had pinned its hopes. After Congress abruptly blocked credits due to the payload ambiguity problem, investment slightly increased in the following year, but remained at a limited level since then. As of today, the conventional prompt strike budget has never reached 200 million dollars – which, though nonnegligible, is still extremely modest in comparison with the U.S. R&D budget (see Figure 1.). Figure 1. Conventional prompt global strike budgets (2004-2019), in millions of dollars<sup>43</sup> Not only has the budget allocated for CPGS programs remained modest (116 million dollars per year on average since 2008), but the projects receiving funding have frequently changed, moving within a few years from CTM to HTV-2 to AHW. This instability, which can be explained both by political motives (nuclear ambiguity of the CTM) and by the disappointing results of HTV-2 tests<sup>44</sup>, has reduced the ability of the project teams to consolidate know-how and overcome technical obstacles they face. In addition, the constraints weighing on the U.S. defense budget since 2011 have constituted a severe test for a nascent program relying on immature technologies. The absolute necessity for the administration to reduce federal spending on a long-term basis meant that budgetary priorities had to be established in the defense sector. Although it has not been publicly acknowledged, the choices were detrimental to CPGS programs. Due to the modest investments and sunk costs to date, the local economic impact of these programs was practically zero. In fact, conventional strategic strike programs seem not to have enjoyed sufficient support from either Congress, the armed forces or the OSD. At the very least, these capabilities have not been considered important enough to be exempted from budgetary cuts. The administration, which had planned in spring 2011 to allocate almost 1.8 billion dollars to CPGS programs over the next five years, found itself forced to drastically scale back its ambitions: in early 2014, the projected credit envelope for CPGS programs through 2018 was divided by almost three, to 673 million dollars (see Figures 2 and 3), which approximately equals the actual spending levels from FY2010 to FY2014. Figure 2 shows the extent to which credits projected on an annual basis dropped sharply after the Budget Control Act was voted in summer 2011, forcing the administration to find more than 1,000 billion dollars in savings over a decade, heavily impacting the Pentagon's budget<sup>45</sup>.

## **Asia forward presence removal will result in CPGS – it's the last stronghold of traditional conventional deterrence**

**Brustlein 15** (Corentin Brustlein, head of the Deterrence and Proliferation research program at the French Institute of International Relations (IFRI), researcher in the institute's joint civil-military Defense Research Unit, and PhD in Political Science from the Jean Moulin University of Lyon, January 2015, Conventionalizing Deterrence? U.S. Prompt Strike Programs and Their Limits, Security Studies Center,

<http://www.ifri.org/sites/default/files/atoms/files/pp52brustlein.pdf>) PA

Indeed, the form taken by U.S. extended deterrence policy seems destined to evolve, under the influence of changes in regional balances of power. While the 1990s and 2000s were marked by the increasing military credibility of U.S. conventional forces (deep strike, multispectral ISR, BMD...), it also witnessed a parallel evolution leading to a relative weakening of the United States strategic credibility and of its ability to politically sustain a permanent forward presence. Over the past 20 years, the disappearance of the existential Soviet threat; the political and financial costs of permanent forward basing on allied territory; the growing vulnerability of regional bases due to cruise and ballistic missile proliferation; and the U.S. command of the commons<sup>34</sup>, encouraged Washington to increasingly base its conventional deterrence on expeditionary, long-range strike and BMD capabilities, relying less on forward deployments. In the current context, ground troops, which had hitherto symbolized the solidity of political links

between the Allies, only rarely play a central role, as is still the case on the Korean peninsula. To maintain a presence in crisis areas and demonstrate its political commitment to local partners, the United States now seems to rely mostly on force rotations (Army, Navy and Air Force units, including BMD) and on strategic signaling in the form of multinational exercises, temporary deployments and maneuvers involving carrier strike groups or strategic bombers based in Guam, Diego Garcia or the continental United States<sup>35</sup>. Through the rebalance to Asia, the U.S. attempts among other things to reinforce an important element of its conventional deterrence posture that should rely on both permanent and temporary forms of forward presence, backed by conventional prompt strike and missile defense capabilities. When the Obama administration entered office in 2008, its ambitions in terms of nuclear arms control and non-proliferation, with the 2010 NPT Review Conference approaching, came on top of the persistent and reasserted need to pursue conventionalization to develop tailored deterrence and damage-limitation capabilities. By establishing a link between planned investments in CPGS and the objective of reducing the role of nuclear weapons in U.S. defense policy, the new administration demonstrated how broad the rationale for conventionalization is in Washington. While major orientations remained globally aligned in the same direction, the preferred prompt strategic strike options were slightly adjusted during the most recent years<sup>36</sup>. Although the Pentagon had declared since 2008 that it viewed CPGS capabilities as a means to retain a credible deterrent while reducing its reliance on nuclear weapons<sup>37</sup>, its initial plans were disrupted by U.S. political and budgetary tribulations: the consequences of the debt crisis on federal spending, combined with the strained relations between the executive and Congress, adversely affected program progress. As a consequence, while the Obama administration has identified the pursuit of conventionalization of the U.S. deterrent as a necessity, its efforts in this respect have been irregular and limited. Even though drivers behind it remain deep and varied, the conventionalization dynamic has run into a series of short- and longer-term constraints and challenges related both to the political and financial environment and to more structural operational and strategic factors. <sup>36</sup>

## **2017 spending was approved by Congress to double PGS spending**

**Woolf 2017** [Amy Woolf at CRS, “Conventional Prompt Global Strike and Long-Range Ballistic Missiles: Background and Issues”, *Congressional Research Service*, <<https://fas.org/sgp/crs/nuke/R41464.pdf>>] //CJC

## **FY2016 The DOD budget request for FY2016 includes \$78.8 million for Prompt Global Strike Capability Development**

Within this total, DOD has allocated \$2 million to the HTV-2 program—the Hypersonic Glide Experiment and Concepts Demonstration Support—line and \$72.95 million to the AHW—Alternate Re-Entry System/Warhead Engineering—line. The request also includes \$2.9 million for CPGS studies and \$1 million for test range development. This request, along with the plans to move forward with the testing program for the AHW, further indicates that DOD has essentially concluded the HTV-2 program and is moving toward the development and deployment of a system using the AHW glider and an intermediate-range booster, possibly deployed at sea. The House, in its version of the FY2016 National Defense Authorization Act (H.R. 1735), provided \$108.8 million for Prompt Global Strike Capability Development. It added \$15 million for Concept Development by the Army of a CPGS option and \$15 million for Concept Development by the Navy of a CPGS option. These additions were intended to support the program following testing complications in prior years. The House bill also contained a sense of the Congress statement noting that “the United States must continue to develop the conventional prompt global strike capability to strike high-value, time-sensitive, and defended targets from ranges outside of current conventional technology while addressing and preventing any risk of ambiguity.” It mandated that the Secretary of Defense submit a report by September 30, 2020, on the outcome of the military requirements process and Milestone A decision for at least one conventional prompt global strike weapons system. The Senate, in its version of the NDAA (S. 1376), authorized \$88.8 million for this program area. In the report accompanying its bill (S.Rept. 114-49), the Senate Armed Services Committee noted that this funding was intended to support DOD’s efforts to examine sea-based and ground-based concepts and to support the flight experiment scheduled for March 2017. The Senate bill also mandated that the Secretary of Defense make a Milestone A decision for the Conventional Prompt Global Strike Weapons System no later than September 30, 2020, or eight months after the successful completion of a second intermediate range flight test. The conference report on H.R. 1735 adopts the Senate funding level, authorizing \$88.8 million for Prompt Global Strike Capability Development, with an added \$5 million allocated to Concept Development by the Navy and Concept Development by the Army. The report also adopts the House language with respect to requesting a report by September 30, 2020, on the outcome of the military requirements process and Milestone A decision for at least one conventional prompt global strike weapons system. **FY2017 The DOD budget request for FY2017**

**includes \$181.3 million for Prompt Global Strike Capability Development**. Within this total, DOD has allocated \$174 million to the AHW—Alternate Re-Entry System/Warhead Engineering—line. The request also includes \$2 million for Hypersonic Glide Experiment and Concepts Demonstration Support, an activity that “supports both ground and flight tests” and provides data needed to support a potential acquisition program. The budget also includes \$3.3 million for CPGS studies and \$2 million for test range development. This request, along with the plans to move forward with the testing program for the Conventional Prompt Global Strike and Long-Range Ballistic Missiles Congressional Research Service 30 AHW, further indicates that DOD is moving toward the development



and deployment of a system using the AHW glider and an intermediate-range booster, possibly deployed at sea. **Congress approved the DOD request of \$181.3 million for Prompt Global Strike Capability** Development in the National Defense Authorization Act for Fiscal Year 2017 (P.L. 114-328). It also mandated, in Section 1688, that the Secretary of Defense make a Milestone A decision for the program by September 30, 2020, or no later than eight months after the successful completion of the second intermediate-range flight test. The legislation also limits the funds available for the program to 75% of the authorized amount until Pentagon officials submit a report to Congress on whether there are warfighter requirements for a "limited operational conventional prompt strike capability" and whether the Pentagon's plan and schedule for the CPGS program supports those requirements. These provisions reflect congressional concerns about the pace and direction of the CPGS program.

## **Spending bill stopped military spending increase**

**Taylor 2017** [Andrew Taylor at WaPo, "Senate sends \$1.1T spending bill to Trump", *Washington Post*, <[https://www.washingtonpost.com/politics/congress/senate-to-send-11t-spending-bill-to-trump/2017/05/04/8c19eb68-30e7-11e7-a335-fa0ae1940305\\_story.html?utm\\_term=.b2ce4f876755](https://www.washingtonpost.com/politics/congress/senate-to-send-11t-spending-bill-to-trump/2017/05/04/8c19eb68-30e7-11e7-a335-fa0ae1940305_story.html?utm_term=.b2ce4f876755)>] //CJC

WASHINGTON — **The Senate has delivered to President Donald Trump the first significant legislation of his presidency, a bipartisan \$1.1 trillion spending bill** that would keep the government running through September — **putting off, for now, battles over Trump's U.S.-Mexico border wall and his promised military buildup**. The lopsided, 79-18 Senate vote sends the huge bill to the White House in plenty of time to avert a midnight Friday shutdown deadline. **Negotiators on the bill dropped Trump's demands for** a down payment on his oft-promised wall along the U.S.-Mexico border, but **his signature would buy five months of funding stability while lawmakers argue over the wall and over Trump's demands for a huge military buildup** matched by cuts to popular domestic programs and foreign aid accounts

## **Trump wants more spending on missile defense**

Charles **Tiefer**, (Forbes Magazine), "President Trump Is Likely To Boost U.S. Military Spending By \$500 Billion To \$1 Trillion", November 9, 2016  
<http://www.forbes.com/sites/charlestiefer/2016/11/09/president-trump-is-likely-to-boost-u-s-military-spending-by-500-billion-to-1-trillion/#377d2ee74108>]

"In his campaign, **Trump called for** 90,000 more Army soldiers, a 350-ship Navy, 100 more fighters, and **strengthened nuclear and missile defenses**. That sounds like detail, but it leaves out quite a bit.....What we do know is that Trump has been drawing many of his defense proposals from the National Defense Panel and the Heritage Foundation. Both of these organizations have advocated for returning the defense budget to the levels proposed in the FY 2012 budget request (the so-called Gates budget). Without any other details from the Trump campaign, I think this is a good ballpark estimate for what Trump is aiming for in terms of the defense budget. The FY 2012 request is about \$800-900B higher over ten years than the most recent president's budget request. The call for a 350-ship Navy gives a concrete clue. Cost figures on such a naval buildup are elusive. However, the Congressional Research Service (CRS) has compiled studies of the different kinds of ships in a 350-ship navy. They don't come cheap. There would be increased spending on aircraft carriers and a big increase in attack submarines. In December 2008, the Navy signed a \$14 billion contract with General Dynamics and Northrop Grumman to supply eight Virginia-class attack submarines. In round figures they might cost, in years to come, at least \$2 billion apiece. The CRS study said that going to a 350-ship navy would mean 11 more of these. That's \$22 billion just on these subs. Congressional hawks – numerous and powerful – will pressure Trump to go that way. And, Congress will be

filling out, not cutting back, the Trump defense budget. Obama used his veto to balance defense and domestic spending. That balance is dead. Moreover, there is bipartisan support for big defense spending. So in the Senate, while there might be a unified Democratic filibuster on some kinds of extreme domestic legislation, there would not be one in opposition to defense spending. The Armed Services Committees basically will have freedom for a massive spending spree. Buckle your belts for a steep climb of defense spending. My rough estimate is it means an additional \$500 billion to \$1 trillion.”

## **PGS stops rogue nations from using nukes and can destroy nuclear materials in other nations; replaces nukes and much faster than current non-nuclear options — but not implemented yet**

**Lewis 2015** [George Lewis, scholar at Cornell’s Institute for Peace and Conflict Studies. “Prompt Global Strike Weapons and Missile Defenses: Implications for Reductions in Nuclear Weapons”, *Cornell University*,

<https://pacs.einaudi.cornell.edu/sites/pacs/files/Lewis.Prompt%20Global%20Strike%20Weapons%20and%20Missile%20Defenses.pdf>] //CJC

**Despite long-standing interest in them, no CPGS weapons have been deployed yet** (except for subsonic cruise missiles, which are also considered in this paper). This paper also simply assumes that CPGS weapons can be made to be reliable and accurate enough to merit actual deployment, which is not yet fully established for all the types of CPGS weapons discussed here. **The United States already has considerable capabilities to accurately strike targets around the world with conventionally-armed missiles** such as the U.S. Navy’s Tomahawk sea-launched cruise missile (SLCM) and the more recent air-delivered extended-range Joint Air-to-Surface Strike Missile. **However, these missiles can take two to four hours to reach their targets and not all targets may be within their range. CPGS weapons are intended to reduce this strike time to under an hour. At a minimum, they would be intended for striking small sets of high-value, time-urgent targets.** In the U.S. context, **examples of such targets include a meeting of the leadership of a terrorist group, an anti-satellite weapon that was being prepared for use against U.S. satellites, a rogue nation threatening or preparing to use a nuclear weapon, or a package of weapons of mass destruction or special nuclear materials temporarily located within a neutral country.**<sup>2</sup> If plans to use CPGS weapons were restricted only to such targets, then only a small number of them might be needed. In addition to the weapons themselves, some types of CPGS attacks might also require faster and more sophisticated intelligence gathering, assessment and attack planning capabilities than are currently available. **The high speed, and in some cases maneuverability, of some types of CPGS weapons might enable them to successfully attack heavily defended targets, including the defenses themselves.** For example, U.S. **CPGS weapons might be used to attack elements of an adversary’s anti-access and area denial system, such as radars and missile launchers, clearing the way for shorter-range and slower systems to more comprehensively attack the adversary.** Such a role might require a much larger force of CPGS weapons than the attacks against “niche” targets mentioned in the preceding paragraph. **CPGS weapons could potentially destroy some targets that are currently vulnerable only to nuclear weapons. They could thereby reduce U.S. reliance on nuclear weapons, and in certain circumstances could eliminate the need to use a nuclear weapon.** CPGS weapons could also give the U.S. President new attack options that would not be credible if carried out by nuclear weapons. Some advocates of **CPGS weapons**

argue that they **could directly substitute for some of the nuclear weapons in U.S. nuclear war plans, thus removing the need for some nuclear weapons and facilitating further nuclear reductions**

**CPGS would kill anyone in an hour, eliminates need for nukes while maintaining deterrence, travels several times the speed of sound and already getting \$250 million in funding, is the only alt to nukes but doesn't cause Russia China backlash—more accurate**

**Sanger 2010** [David Sanger is a writer for the New York Times, “U.S. Faces Choice on New Weapons for Fast Strikes”, *New York Times*,

<<http://www.nytimes.com/2010/04/23/world/europe/23strike.html> >] //CJC

In coming years, President Obama will decide whether to deploy **a new class of weapons capable of reaching any corner of the earth from the United States in under an hour and with such accuracy and force that they would greatly diminish America's reliance on its nuclear arsenal.**

Yet even now, concerns about the technology are so strong that the Obama administration has acceded to a demand by Russia that the United States decommission one nuclear missile for every one of these conventional weapons fielded by the Pentagon. That provision, the White House said, is buried deep inside the New Start treaty that Mr. Obama and President Dmitri A. Medvedev signed in Prague two weeks ago. **Called Prompt Global Strike, the new**

**weapon is designed to carry out tasks like picking off Osama bin Laden in a cave, if the right one could be found; taking out a North Korean missile while it is being rolled to the**

**launch pad; or destroying an Iranian nuclear site** — all without crossing the nuclear threshold. In theory, the weapon will hurl a conventional warhead of enormous weight at high speed and with **pinpoint accuracy**, generating the localized destructive power of a nuclear warhead.

The idea is not new: President George W. Bush and his staff promoted the technology, imagining that this new generation of conventional weapons would replace nuclear warheads on submarines. In face-to-face meetings with President Bush, Russian leaders complained that the technology could increase the risk of a nuclear war, because Russia would not know if the missiles carried nuclear warheads or conventional ones. Mr. Bush and his aides concluded that the Russians were right. Partly as a result, the idea “really hadn't gone anywhere in the Bush administration,” Defense Secretary Robert M. Gates, who has served both presidents, said recently on ABC's “This Week.” But he added that it was “embraced by the new administration.” Mr. Obama himself alluded to the concept in a recent interview with The New York Times, saying it was part of an effort **“to move towards less emphasis on nuclear weapons” while insuring “that our conventional weapons capability is an effective deterrent** in all but the most extreme circumstances.”The Obama national security team scrapped the

idea of putting the new conventional weapon on submarines. Instead, **the White House has asked Congress for about \$250**

**million next year to explore a new alternative**, one that uses some of the most advanced technology in the military today as well as some not yet even invented. The final price of the system remains unknown. Senator John McCain of Arizona, the ranking Republican on the Senate Armed Services Committee, said at a hearing on Thursday that Prompt Global Strike would be “essential and critical, but also costly.” It would be based, at least initially, on the West Coast, probably at Vandenberg Air Force Base. Under the Obama plan, the Prompt Global Strike warhead would be mounted on a long-range missile to start its journey toward a target. **It would travel through the atmosphere at several times the speed of sound,**

generating so much heat that it would have to be shielded with special materials to avoid melting. (In that regard, it is akin to the problem that confronted designers of the space shuttle decades ago.) But **since the vehicle would remain within the atmosphere rather than going into space, it would be far more maneuverable than a ballistic missile, capable of avoiding the airspace of neutral countries, for example, or steering clear of hostile territory.** Its designers note that **it could fly straight up the middle of the Persian Gulf before making a sharp turn toward a target.**The

Pentagon hopes to deploy an early version of the system by 2014 or 2015. But even under optimistic timetables, a complete array of missiles, warheads, sensors and control systems is not expected to enter the arsenal until 2017 to 2020, long after Mr. Obama will have left office, even if he is elected to a second term. The planning for Prompt Global Strike is being headed by Gen. Kevin P. Chilton of the Air Force, the top officer of the military's Strategic Command and the man in charge of America's nuclear arsenal. In the Obama era — where every administration discussion of nuclear weapons takes note of Mr. Obama's commitment to moving toward “Global Zero,” the elimination of the nuclear arsenal — the new part of General Chilton's job is to talk about conventional alternatives. In an interview at his headquarters at Offutt Air Force Base, General Chilton described

how the conventional capability offered by the proposed system would give the president more choices. **“Today, we can present some**

conventional options to the president to strike a target anywhere on the globe that range from 96 hours, to several hours maybe, 4, 5, 6 hours," General Chilton said. **That would simply not be fast enough**, he noted, if intelligence arrived about a movement by Al Qaeda terrorists or the imminent launching of a missile. "If the president wants to act on a particular target faster than that, **the only thing we have that goes faster is a nuclear response**," he said. **But the key to filling that gap is to make sure that Russia and China, among other nuclear powers, understand that the missile launching they see on their radar screens does not signal the start of a nuclear attack**, officials said. Under the administration's new concept, **Russia or other nations would regularly inspect the Prompt Global Strike silos to assure themselves that the weapons were nonnuclear. And they would be placed in locations far from the strategic nuclear force**. "Who knows if we would ever deploy it?" Gary Samore, Mr. Obama's top adviser on unconventional weapons, said at a conference in Washington on Wednesday. But he noted that Russia was already so focused on the possibility that it insisted that any conventional weapon mounted on a missile that could reach it counted against the new limit on the American arsenal in the treaty. In a follow-on treaty, he said, the Russians would certainly want to negotiate on Prompt Global Strike and ballistic missile defenses. If Mr. Obama does decide to deploy the system, Mr. Samore said, **the number of weapons would be small enough that Russia and China would not fear that they could take out their nuclear arsenals**.

## **Travels at 20x speed of sound, hits anything in minutes, deters China from attacking our satellites and kills their A2/AD capability, drastically increases deterrence for everyone**

Harrington 13 [Elizabeth Harrington is a writer at the Washington Free Beacon, "Expert: Conventional Prompt Global Strike System Could Deter China", *Washington Free Beacon*, <<http://freebeacon.com/national-security/expert-conventional-prompt-global-strike-system-could-deter-china/>>] //CJC

**A weapons system being developed by the United States that could reach targets anywhere around the world "within minutes"** is focused more on deterring China than Russia, according to a report released Tuesday. ¶ **The U.S. military has been researching and testing the "Conventional Prompt Global Strike" (CPGS) system for a decade, a technology that would allow the deployment of non-nuclear weapons from outer space to specific targets in a matter of minutes or hours.** ¶ **One form of the technology is described as a "super-involved paper airplane," which can travel 20 times the speed of sound.** The Pentagon is currently studying multiple uses for the system, including satellite defense and counterterrorism. A new report unveiled at the Carnegie Endowment for International Peace in Washington, D.C., explores the options being considered. The report's author, James M. Acton, concluded **the technology has more use in deterring China** than other nations. "The Pentagon has not made any doctrinal decisions as far as I can tell about what CPGS will be used for," said Acton, a senior associate of the Carnegie Nuclear Policy Program. "Two of the possible missions are very China focused." "China's nuclear forces are much smaller than Russia's nuclear forces," he said. "And the Chinese are a hell of a lot more serious about developing this technology than the Russians are." **Congress appropriated \$174.8 million for CPGS capability development in FY2012.** The Department of Defense officially added prompt global strike (PGS) as a needed mission in 2003, to provide the United States with "the ability to strike targets anywhere on Earth with conventional weapons in as little as an hour." Acton explained the three basic technologies currently being developed. **"First, you can take the ballistic missile, stick a conventional warhead on top, and this thing goes through a standard ballistic trajectory up into space, back down again,"** he said. "And at the very end of its flight when it reenters the atmosphere, you can add a pair of flaps on the reentry vehicle to steer it onto its target." "Boost glide systems" are the current favorite by the Pentagon, Acton said. "[It's] a bit like a super involved paper airplanes, if you like, that are capable of gliding 20 times the speed of sound in the upper atmosphere," he said. "And these would be launched into the upper atmosphere by rockets and then glide for potentially thousands of kilometers purely under their own steam." The third technology is a much faster version of a cruise missile. Acton said there are four possible **roles for CPGS being**

**explored by U.S. officials, including a “counter nuclear mission,” to deny a country from obtaining nuclear weapons, and a counterterrorism mission.** Two other areas, countering anti-satellite capabilities and defense suppression, are “very largely focused on China,” Acton said. “The China angle, there’s a lot more going on there,” he said. “There’s also a much greater possibility of instability arising in China scenarios than Russia scenarios.” **China’s ballistic missile arsenal is expanding. The development of the CPGS system could deter Chinese weapons that may be used to knock out U.S. satellites.** According to Acton’s report, “Beijing is believed to be developing various [antisatellite] ASAT weapons and some Chinese military writings stress the potential value of antisatellite operations against the United States.” Efforts to block America’s access to certain regions are also a concern to the military. “As the recent ‘rebalance’ to Asia exemplifies, concerns about the possibility of conflict with China are particularly prominent,” according to the report. **CPGS has been proposed as a potential way of neutralizing two such asymmetric threats,” Acton writes, “antisatellite (ASAT) weapons and anti-access/area-denial (A2/AD) capabilities.”** Acton said he is “generally agnostic” about the program. A point Acton is certain on is the system’s potential to deter America’s adversaries. **The very fact that all of these weapons could be unpredictable and dangerous can raise the cost of war and enhance deterrence,** he said. “Moreover, I think there is preliminary but reasonably persuasive evidence that China and Russia and other states think these weapons would be extremely effective, which may also mean it can enhance deterrence.”

## **PGS is better than nuclear deterrence — people are terrified that PGS can destroy their nukes without the US using nukes and the potential for PGS escalations further prevents conflicts — only need up to \$2B more in funding**

**Acton 2013** [James Acton is a senior associate in the Nuclear Policy Program at the Carnegie Endowment, “Silver Bullet?: Asking the Right Questions About Conventional Prompt Global Strike”, *Carnegie Endowment*, <<http://carnegieendowment.org/files/cpgs.pdf>>] //CJC

In addition to affecting an adversary’s behavior in a crisis or a conflict, **CPGS** could also have effects on potential adversaries during peacetime. One desirable possibility is that it **might contribute to deterrence.**<sup>87</sup> Not only would this be a good in itself, but **enhanced conventional deterrence could allow the United States to further reduce the role of nuclear weapons in its defense doctrine** (which would probably be applauded by many nonnuclear-weapon states and regarded with quiet concern by nuclear-armed potential adversaries worried about conventional counterforce). Conventional deterrence is generally argued to rely upon making an adversary believe that it would be unable to achieve its objectives quickly and at relatively low cost.<sup>88</sup> As such, it stems from the total capability of U.S. forces that are deployed locally or could be available quickly. For this reason, it is usually hard to disaggregate the contribution made by any one particular weapon system. However, given that proponents argue **CPGS could be uniquely able to hold certain high value targets at risk in scenarios where nuclear use would be politically unacceptable, there is certainly a**

**plausible argument that it could make a significant contribution to deterrence.** In fact, in assessing this contribution, **what matters is not so much the actual capability and usability of CPGS, as potential adversaries' perception of these characteristics.** Accurately assessing potential adversaries' perception of any U.S. weapon system, especially one like CPGS that is still a research and development project, is difficult. But **Russian and Chinese fears about the possible impact of CPGS weapons on the survivability of their nuclear forces do suggest that they view CPGS as both highly capable and significantly more usable than nuclear weapons.** Interpreting this one data point requires a good deal of caution. Being more usable than nuclear weapons is an extremely low bar (in most conflicts, being no less usable than other conventional weapons would be the relevant criterion). Because Beijing and Moscow are concerned about U.S. precision-guided weapons in general, it is hard to disaggregate their particular thoughts about CPGS (which may change anyway as candidate technologies are further developed and tested). Finally, Russian and Chinese views may not be representative of other states. These caveats notwithstanding, **the evidence does tentatively suggest that CPGS is likely to enhance deterrence.** Additionally, **the risks of escalation resulting from the use of CPGS may also be a deterrent in themselves.**<sup>89</sup> Specifically, **these risks might persuade a potential adversary contemplating aggression against the United States or an ally that it would be unlikely to achieve its objectives quickly or painlessly and thus help tip the adversary's calculation in favor of restraint.**

[...]

Any estimates of the timetable and costs for developing a long-range hypersonic cruise missile are subject to significant uncertainties. As a point of reference, a senior U.S. official stated that the goal for the High Speed Strike Weapon program is a demonstration flight by 2018.<sup>91</sup> If this milestone is achieved successfully then, based on past experience, an operational weapon might become available by 2025.<sup>92</sup> This timeline is broadly consistent with the estimates produced by the NRC in its 2008 study.<sup>93</sup> It is

longer than the probable timelines for any of the boost-glide or ballistic systems—although probably not by much. **Current funding levels would have to be increased significantly to develop a long-range hypersonic missile** in this timescale. The X-51A program manager, Charlie Brink, has stated that from FY 2004 to FY 2011 **about \$250 million was spent on the program** at an average rate of about \$30 million per year.<sup>94</sup> The NRC estimated that **attaining an initial operational capability would cost between \$900 million and \$2.6 billion.**<sup>95</sup>

**PGS hits anything in an hour or less, solves nuke usage, prolif, and terrorism, improves deterrence, allied assurances, nuke effectiveness, and shores up US military credibility—no risk of Russian miscalc or arms race in response and probability is high—broad support and tech exists—also more accurate**

Payne 2012 [Keith Payne, Professor and Head of the Graduate Department of Defense and Strategic Studies, Missouri State University. "Conventional Prompt Global Strike: A Fresh Perspective", *National Institute for Public Policy*, <<http://www.nipp.org/wp-content/uploads/2014/12/CPGS-REPORT.pdf>>] //CJC

**The general concept of a U.S. conventional prompt global strike (CPGS) capability with the potential to strike targets anywhere in the world in an hour or less has been broadly supported.**

Nevertheless, concerns remain over specific types of CPGS systems and whether their use may be misconstrued as a nuclear attack, prompting a response in kind. Concerns over "nuclear ambiguity" issues have to date stymied rapid progress in developing and fielding CPGS capabilities. Although the impetus toward developing a CPGS capability was launched a decade ago, the fielding of CPGS systems is still years away. Several new developments in recent years, however, suggest that the time is ripe to reconsider the role that CPGS can play in accomplishing U.S. national security objectives, the specific types of CPGS systems that can best fulfill U.S. military objectives, and the impact of deploying and employing CPGS weapons on global stability. These developments include: • changes in the executive and legislative branches that suggest bipartisan interest and support for CPGS; • technological advancements that allow for a range of additional CPGS Options; • a new strategic arms control environment

that allows greater flexibility in the development and deployment of specific types of CPGS systems; and • an increasingly austere fiscal and budgetary environment that will necessitate trade-offs and the reprioritization of defense efforts and investment priorities. The goal of **CPGS is to provide the United States with credible non-nuclear options for preventing or responding to aggression.** Yet these conventional options also complement and support the Obama administration's policies and plans for U.S. strategic forces, as enunciated in the April 2010 Nuclear Posture Review (NPR). In particular, **a CPGS capability can help realize each of the five key nuclear weapons policy objectives identified in the NPR, including: preventing nuclear proliferation and nuclear terrorism; reducing the role of U.S. nuclear weapons in U.S. national security strategy; maintaining strategic deterrence and stability at reduced nuclear force levels; strengthening regional deterrence and reassuring U.S. allies and partners; and sustaining a safe, secure, and effective nuclear arsenal. CPGS can help enable these goals by providing the United States with credible military strike options against time-sensitive, high-value, or fleeting targets without the need to resort to nuclear weapons.** Many of these targets are protected by adversaries or beyond the effective range of existing conventional military assets. **By closing gaps in the U.S. ability to strike at targets quickly and accurately over long distances, a CPGS capability can enhance deterrence and stability; dissuade potential proliferators and defeat their efforts; allow for reductions in nuclear force levels; and reassure allies of the U.S. commitment to their security** in light of concerns over declining reliance on the U.S. viii Conventional Prompt Global Strike: A Fresh Perspective “nuclear umbrella.” In addition, **because the industrial base capabilities to develop CPGS systems are similar to those required for sustainment of the nuclear deterrent, a CPGS capability can help maintain the skills and expertise required for the nuclear enterprise. As technology has matured, a number of promising CPGS concepts merit serious consideration. These include basing and deployment options that would minimize concerns over nuclear ambiguity and the risks of a reflexive nuclear response.** Various land- and sea-based concepts can augment U.S. conventional strike capabilities considerably. Land-based CPGS concepts, such as the Conventional Strike Missile (CSM), may be deployed on the territory of the United States while other concepts, like the Advanced Hypersonic Weapon (AHW) may be deployed globally in locations such as Guam, Diego Garcia, or Puerto Rico. A variety of sea-based CPGS systems, such as Conventional Trident Modification (CTM), ArLight, and Sea Strike could be deployed on submarines or surface ships. **Each of these systems and basing modes has distinct characteristics and a flight profile that makes it more or less observable to countries with the technical capability to monitor U.S. missile launches. To varying degrees, each has a discrimination profile that could enable the observing country to distinguish a CPGS in various stages of flight.** The components and characteristics of each CPGS concept may determine whether the concept is subject to a particular arms control treaty and, if so, what constraints would apply. Both the Intermediate-Range Nuclear Forces (INF) Treaty and the New START Treaty contain provisions that could have a direct bearing on the deployment of certain CPGS systems. New START, in particular, is likely to capture certain types of CPGS systems and the Obama administration has acknowledged this. As a result, the administration has indicated that only a modest number of CPGS systems will be deployed to fill a “niche” role. Nevertheless, because of definitional issues contained in the New START Treaty, it may be potentially easier and less costly to deploy CPGS weapons under New START than under the now-expired START I Treaty. New START actually permits numerous options for CPGS concepts, both within and outside the Treaty limits. **Concerns by Russia and China over the nuclear ambiguity issue appear to be exaggerated. Statements by Russian and Chinese officials suggesting that the U.S. launch of a CPGS weapon could be met with a nuclear response reflect a desire to forestall the development of the CPGS program within the United States.** In particular, Russian political leadership statements to this effect have been contradicted by **Russian military officials, who suggest such a reaction by Russia is highly unlikely. Russia has revitalized its launch detection and tracking capability since the 1990s and would have little difficulty distinguishing the launch and flight of a CPGS weapon from a nuclear missile.** Should any uncertainty exist, nevertheless, **Russia's behavior in the past demonstrates a realistic amount of caution in responding to ambiguous missile threats. There is no reason to believe Russia's response would be different today,** particularly as its early warning capabilities have improved. Conventional Prompt Global Strike: A Fresh Perspective ix Finally, **some believe the development of CPGS capabilities by the United States would spark an arms race as other countries seek to develop similar capabilities in response. In reality, trends in weapons development suggest that movement toward longer-range, more accurate conventional ballistic missiles is not the result of an arms race dynamic. Russia, China, and other countries have long understood the military operational benefits of strike systems with greater range and accuracy,** and their pursuit of such

capabilities undermines their stated concerns over the supposedly destabilizing nature of the U.S. CPGS program. Indeed, **the technologies that allow for such improvements are becoming increasingly ubiquitous.** Therefore, **there does not appear to be a direct correlation between the U.S. push to develop CPGS and the desire of other countries to develop precision missiles and weapons that can strike at greater distances.**

## **Obama wants higher PGS funding than the squo—proves high probability**

**Woolf 2016** [Amy Woolf, Specialist in Nuclear Weapons Policy at the Congressional Research Service, “Conventional Prompt Global Strike and Long-Range Ballistic Missiles: Background and Issues”, *Congressional Research Service*, <<https://fas.org/sqp/crs/nuke/R41464.pdf>>] //CJC

The Air Force and Navy have both considered deploying conventional warheads on their longrange ballistic missiles. The Navy sought to deploy conventional warheads on a small number of Trident II submarine-launched ballistic missiles. In FY2008, Congress rejected the requested funding for this program, but the Navy has continued to consider the possibility of deploying intermediate-range technologies for the prompt strike mission. The Air Force and the Defense Advanced Research Projects Agency (DARPA) are developing a hypersonic glide delivery vehicle that could deploy on a modified Peacekeeper land-based ballistic missile—a system known as the conventional strike missile (CSM). **In FY2008, Congress created a single, combined fund to support research and development for the CPGS mission. Congress appropriated \$65.4 million for this program in FY2014, \$95.6 million in FY2015, and \$88.7 million in FY2016. The Obama Administration has requested \$181.3 million for FY2017.**

## **PGS easily destroys missiles before they’re launched and probably can hit them midair — only need to be within 100m**

**Acton 2013** [James Acton is a senior associate in the Nuclear Policy Program at the Carnegie Endowment, “Silver Bullet?: Asking the Right Questions About Conventional Prompt Global Strike”, *Carnegie Endowment*, <<http://carnegieendowment.org/files/cpgs.pdf>>] //CJC

Fixed Soft Targets. **CPGS weapons would** likely be effective against fixed soft targets.<sup>53</sup> Although the weapons could be loaded with explosive warheads, a more effective means of destroying such targets would probably be through the **use of a particle dispersion warhead,** such as that planned for the (now cancelled) Conventional Strike Missile demonstration flight.<sup>54</sup> **This warhead would consist of several thousand metal rods, known as flechettes. Shortly before impact, a small quantity of explosive would be used to disperse these rods, creating a circular “cloud,” tens of meters in diameter, made up of flechettes travelling very rapidly toward the target. The flechettes would damage the target simply by punching holes through it** (the explosive has no role in this; its only role is to disperse the flechettes). That said, for two reasons, the effectiveness of CPGS weapons against fixed soft targets is not a particularly important consideration. First, the majority of likely mission-critical targets for CPGS would be either mobile or buried (see table 1 on p. 26). Second, existing weapons, including air-dropped bombs and cruise missiles, are also likely to be effective against fixed soft targets.<sup>55</sup> **Mobile Targets.** A much more significant and notoriously difficult challenge is **destroying mobile targets, including terrorists, anti-ship ballistic missiles, some antisatellite weapons and most nuclear-armed ballistic missiles.** Indeed, **all states with ballistic missiles that the United States might plausibly attack with CPGS—North Korea, Iran, and China—use mobility as the primary means of protecting their missile forces.**<sup>56</sup> For this reason, if **CPGS is to be used to eliminate missiles preemptively**—or, as one U.S. military officer put it, to become “a potential left-of-launch capability in the missile defense business”—its ability to eliminate mobile missiles is critical.<sup>57</sup> The challenges of attacking mobile missiles were famously highlighted by the “great Scud hunt” during the 1991 Gulf War when the United States failed to achieve a single confirmed kill of a missile-related target despite 1,460 sorties directed against them.<sup>58</sup> U.S. capabilities to attack mobile targets have improved significantly since then.<sup>59</sup> However, the following considerations suggest that the circumstances in which CPGS would be most effective against mobile targets—when airborne assets were operating from within the theater to provide targeting data—are also circumstances in which CPGS would not be needed (because the airborne assets used for surveillance could also carry weapons). **The easiest way to destroy a mobile target is to wait**



**until it stops moving before striking it.** For example, some North Korean road-mobile missiles, such as the Nodong, must be fueled before use, creating a window of maybe thirty to ninety minutes—and perhaps even longer—in which they would be stationary before launch.<sup>60</sup> In other cases, it is preferable to try to attack a missile while it is moving. For example, mobile missiles with storable propellants, including all Chinese ballistic missiles, could be launched much more quickly than Nodong missiles. **If such a missile were detected while moving, it would be highly desirable to try to attack it immediately.** Waiting for it to stop would carry the risk of “losing” it and then failing to reacquire it before it was used. Of course, this risk might be more tolerable if the weapon were armed with a conventional rather than a nuclear warhead. Nonetheless, in many circumstances, the strategy of waiting for a mobile target to stop before attacking would probably be a poor second to attacking while it was on the move. While **striking mobile targets once they have stopped is clearly aided by having fast weapons, such as CPGS,** with short travel times, weapon speed does not obviate the need for outstanding intelligence, surveillance, and reconnaissance (ISR). Attacking a moving target is an even harder problem. Under a rather optimistic set of assumptions, **a CPGS system armed with a particle dispersion warhead might have to land within 100 m (300 ft.) of a mobile missile to destroy it.**

## **Trump is unpredictable, trigger happy, and uniquely likely to make the wrong decision under pressure—nuclear war is a real threat—and Republicans support missile defense**

**Blair 2016** [Bruce Blair is a nuclear security expert and a research scholar at the Program on Science and Global Security at Princeton, “Trump Could Face a Nuclear Decision Soon”, *Politico*, <<http://www.politico.com/magazine/story/2016/11/trump-north-korea-nuclear-crisis-214457>>] //CJC

I was the former nuclear missile launch officer who in October appeared in a TV advertisement for Hillary Clinton, saying: “The thought of **Donald Trump with nuclear weapons scares me to death.** It should scare everyone.” The ad featured various quotes from Trump’s campaign rallies and interviews, in which he says, among other things: **“I would bomb the shit out of ’em,” “I wanna be unpredictable,” and “I love war.”** As I walked through a nuclear missile launch center in the ad, I explained that “self-control may be all that keeps these missiles from firing.” We will see all of our fears—and the new president-elect’s self-control—put to the test over the next four years. **When Trump takes the oath of office on Jan. 20, 2017, there will be no shortage of combustible tensions around the globe.** And Trump will need to make some critical decisions quickly—including whether he truly wants, as he suggested during the campaign, a world in which there are even more nuclear powers than we have today. These tensions are present even now and show no signs of easing. For starters, U.S.-led **NATO and Russian military forces are shadow boxing with increasing intensity.** The mutual intimidation is steadily escalating, and Trump’s soft commitment to NATO’s defense has not helped. Rather than assuaging the Russians, it has only stoked insecurity in Europe and perhaps tempted Russia to intervene in the Baltic states. In other words, appeasement only makes matters more unstable. In East Asia, meanwhile, a mercurial and belligerent **leader of North Korea will soon be able to brandish nuclear-armed missiles to credibly threaten South Korea, Japan and the U.S.** homeland with nuclear devastation. The timeline for this threat to materialize is very short—months or a low number of years. (Trump himself mentioned the threat in his “60 Minutes” interview on Sunday.) Kim Jong Un’s provocations combined with Trump’s soft-pedaling of the U.S. defense commitment in Asia have put the entire region on

edge and provoked South Korea to consider acquiring a nuclear arsenal in self defense. **There are other crises brewing as well, including in the South China Sea and the Middle East.** **As China lays claim to nearly all of this sea in part to create safe bastions for its new fleet of ballistic missile submarines, the U.S. has intensified its air, sea, and undersea surveillance and anti-submarine warfare operations, increasing the chances of hostile encounters. In the Middle East, U.S. and Russian forces are operating in very close and not-so-friendly quarters in the Syrian theater, and the specter of a region going nuclear looms larger than ever as Trump warns he will tear up and re-negotiate the hard-won Iranian nuclear deal.** This ill-advised move would set Iran free to resume its nuclear program, while spurring Iran's enemies to follow suit, as well as re-opening the debate over U.S.-Israeli pre-emptive strikes against Iranian nuclear facilities. **All of these crises are percolating at once.** They threaten to overwhelm even the savviest of presidents and advisers. **Can we rely on Trump to act with diligence, competence, diplomatic skill, reason and restraint?** The verdict of a plurality of the electorate who voted for Clinton and of **the vast majority of foreign policy experts is one of profound doubt that he can handle the pressure.** **He has proved himself over and over again to be quick-tempered, defensive, prone to lash out, adamant in dividing the world into winners and losers, and quick to invoke either the use of force or the backing away from U.S. defense commitments.** **He is ill-informed about nuclear weapons and the policies that govern their role and use. He offhandedly entertains their use, raising doubts whether he can be trusted with the nuclear codes.** The danger exists that **the Trump national security team** headed by an inexperienced and hot-headed commander in chief **will prove too inept to defuse a crisis, and that it will escalate to nuclear conflict** with devastating consequences for the country, our allies and the world. **Given that unpredictability appears to be the crux of his national security game plan,** predicting his behavior is perhaps a fool's errand. But let's consider the two most immediate and fraught crises that he will inherit—the U.S.-Russian stand-off and the imminent nuclear threat from North Korea. There are grounds for some optimism that the former can be defused. In past, confrontations with the Soviets, such as the 1962 Cuban Missile Crisis and the 1973 Arab-Israeli War, presidents sometimes rattled the nuclear saber but rejected using it. **Trump has been much more open to the first use of nukes than any of his predecessors** since Eisenhower. The better news is that he seems determined to improve relations with Russia. Many of the leading candidates for appointment to his national security team are ideologues who are very likely to advise against extending an olive branch to the Russian bear. They harbor deep-seated suspicions of Russia and will attempt to smother any pragmatic moves toward rapprochement. But if Trump's pragmatism prevails without eroding NATO solidarity and weakening its security, then he might succeed not only in de-escalating the situation but also in paving the way for security cooperation on many fronts. One intriguing possibility is that he would pursue détente with Russia through nuclear arms control. A breakthrough in the relationship might even yield a grand bargain that, say, reduces nuclear arms by one-third to 1,000 on each side, pledges both sides not to be the first to use nuclear weapons, stands down their nuclear missiles on hair-trigger launch readiness, establishes a joint center to process early warning data in order to prevent false alarms from inducing an inadvertent launch, reaffirms their obligations to existing treaties and scraps the missile defense systems in Europe that Russia so vehemently opposes. Trump's deal-making talent may prove wanting, however as **congressional Republicans adamantly support missile defenses and comprehensive modernization of U.S. nuclear strike forces.** Other factors could also thwart an overture to Russia, including intentional acts or accidents between rival fighter aircraft that result in loss of life, triggering further escalation of tensions that could ultimately spin out of control. **A conventional conflict could ensue and precipitate a nuclear response, probably by Russia, which relies much more on nuclear weapons than does the United States, but who knows how an unpredictable commander in chief who consults mainly with himself might behave.**

**We know where everyone's nukes are—it's public knowledge**

**Kristensen 2009** [Hans Kristensen is the director of the Nuclear Information Project at the Federation of American Scientists, “Estimated Nuclear Weapons Locations 2009”, *Federation of American Scientists*, <<http://fas.org/blogs/security/2009/11/locations/>>] //CJC

**The world’s approximately 23,300 nuclear weapons are stored at an estimated 111 locations in 14 countries,**

according to an overview produced by FAS and NRDC. Nearly half of the weapons are operationally deployed with delivery systems capable of launching on short notice. The overview is published in the Bulletin of the Atomic Scientists and includes the July 2009 START memorandum of understanding data. A previous version was included in the annual report from the International Panel of Fissile Materials published last month. **Russia has an estimated 48 permanent nuclear weapon storage sites, of which more than half are on bases for operational forces.** There are approximately 19 storage sites, of which about half are national-level storage facilities. In addition, a significant number of temporary storage sites occasionally store nuclear weapons in transit between facilities. **This is a significant consolidation from the estimated 90 Russian sites ten years ago, and more than 500 sites before 1991. Many of the Russian sites are in close proximity to each other and large populated areas.** One example is the Saratov area where the city is surrounded by a missile division, a strategic bomber base, and a national-level storage site with probably well over 1,000 nuclear warheads combined (Figure 2). **The United States stores its nuclear weapons at 21 locations in 13 states and five European countries.** This is a consolidation from the estimated 24 sites ten years ago, 50 at the end of the Cold War, and 164 in 1985 (see Figure 3). Approximately 50 B61 nuclear bombs inside an igloo at what might be Nellis Air Force Base in Nevada. Seventy-five igloos at Nellis store “one of the largest stockpile in the free world,” according to the U.S. Air Force, one of four central storage sites in the United States. **Europe has about the same number of nuclear weapon storage locations as the Continental United States, with weapons scattered across seven countries.** This includes seven sites in France and four in Britain. Five non-nuclear NATO countries (Belgium, Germany, Italy, the Netherlands, and Turkey) still host U.S. nuclear weapons first deployed there during the Cold War. We estimate that **China has 8-14 facilities associated with nuclear weapons,** most likely closer to the lower number, near bases with units that operate nuclear missiles or aircraft. None of the weapons are believed to be fully operational but stored separate from delivery vehicles at sites controlled by the Central Military Commission.

**Early warning systems detect launches immediately—currently have no defense**

**Thompson 2015** [Loren Thompson is a writer for Forbes, “The U.S. Has No Defense Against A Russian Nuclear Attack. Really.”, *Forbes*, <<http://www.forbes.com/sites/lorenthompson/2015/03/20/the-u-s-has-no-defense-against-a-russian-nuclear-attack-really/2/#1646f34a1e0b>>] //CJC

That deterrent — a “triad” of land-based and sea-based missiles plus bombers — is arguably the most important feature of the U.S. military posture for the simple reason that Russia’s nuclear arsenal is the most important threat. However, on the day deterrence fails, America’s highly capable strategic force will be little comfort because it can’t do anything to intercept incoming warheads. All it can do is lay waste to Russia. The minimal defensive system the Obama Administration has sustained against North Korea’s fledgling nuclear threat, called the Ground-based Midcourse Defense, can potentially intercept warheads attacking from any direction, but more than a dozen Russian warheads would overwhelm it. So here we sit, **able to detect a Russian launch almost immediately and retaliate with devastating force, but powerless to defend our homeland and loved ones from nuclear aggression.** This is the kind of strategic myopia that eventually leads to catastrophe. **What**

America needs is a layered, resilient defensive network against Russian ballistic missiles that at least can negate the kind of limited attack resulting from a strategic error or miscalculation. That network would presumably include elements on land, at sea and in space that could give defenders multiple shots against any incoming warheads. After all, if you have three layers that are each 80% effective, then cumulatively only one in a hundred warheads would get through to their targets.

## **Missile defense solves all forms of proliferates—takes away incentive to get nukes**

**Payne 15** (Dr. Keith B. Payne is president of the National Institute for Public Policy, and professor and department head at the Graduate School of Defense and Strategic Studies at Missouri State University (Washington campus). He is a former deputy assistant secretary of defense and served on the bipartisan Congressional Strategic Posture Commission (Perry-Schlesinger Commission). *Deterrence in the Second Nuclear Age*, 2015. Available on Muse, accessed via the Wake Forest library system.) //CJC

Finally, rather than undermining traditional diplomatic arms control efforts, effective missile defense may contribute to nonproliferation measures. Because missile defense will constitute a unique means of protecting against some of the threats posed by proliferation, it could undermine the military and political value that many regional rogues now attribute to missiles, reducing the incentives to acquire, market, or maintain missiles. In this way, missile defenses may help reduce the demand for missiles and complement traditional diplomatic efforts to control the supply side of the missile proliferation equation. There is some historical precedent for suggesting this positive relationship between missile defense and diplomatic nonproliferation efforts. For example, in the late 1980s a Middle Eastern country proposed to the U.S. that a "missile-free zone" be established in the Middle East, based on cooperation by the potential parties with the United States in the area of missile defense." In 1994 the Russian Federation proposed an international ban on all theater-range missiles, in the context of cooperation on missile defense.<sup>3</sup> The rationale for integrating missile defense with diplomatic efforts to limit regional missile arsenals is that missile defenses could reduce the perceived value of offensive missiles, making them easier to give up under such efforts; defenses would provide protection for parties to the agreement against nonsignatories and the possibility of cheating. In short, missile defense could both reduce the incentives to acquire or maintain missiles and help provide the confidence governments would need to participate in a general agreement to give up the missile option.

## **PGS deters better than nukes because it's usable—no one thinks we'll use nukes offensively**

**Bunn 2011** [M. Elaine Bunn is a Distinguished Research Fellow in the Center for Strategic Research (CSR), Institute for National Strategic Studies, at the National Defense University. "Conventional Prompt Global Strike: Strategic Asset or Unusable Liability?", *National Defense University*, <<http://ndupress.ndu.edu/Portals/68/Documents/stratforum/SF-263.pdf>>] //CJC

**The Conventional Prompt Global Strike (CPGS) concept calls for a U.S. capability to deliver conventional strikes anywhere in the world in approximately an hour.** The logic of the CPGS concept is straightforward. The United States has global security commitments to deter and respond to a diverse spectrum of threats, ranging from terrorist organizations to near-peer competitors. The United States might need to strike a time-sensitive target protected by formidable air defenses or located deep inside enemy territory. Small, high-value targets might

pop up without warning in remote or sensitive areas, potentially precluding the United States from responding to the situation by employing other conventional weapons systems, deploying Special Operations Forces (SOF), or relying on the host country. **A long-range nuclear-armed ballistic missile has the speed and global reach to overcome these obstacles. But a President would probably prefer a conventional strike option as an alternative to nuclear weapons in most contingencies.** In fact, many advocates of the **CPGS** concept argue that it **would provide a new capability for scenarios in which existing conventional systems would be insufficient but the use of nuclear weapons would be inappropriate.** Additionally, in many potential crises, **a nuclear threat might lack credibility in the eyes of U.S. allies and adversaries regardless of a U.S. President's willingness to employ nuclear force.** At the same time, U.S. allies and potential adversaries might question whether existing U.S. conventional weapons would be effective against some emerging threats. **A long-range conventional strike capability might enhance deterrence and assurance by providing an effective and usable (and thus more credible) strike option.** For these reasons, **a conventional weapon that is faster, travels farther, and is more effective against antiaccess capabilities than existing conventional forces would be a valuable strategic asset.**

## **SCS conflict inevitable in the status quo – growing dominance of hardliners, increased rivalry, and lack of trust**

**Kuo 2016** – Lily Kuo, Reporter for Quartz, formerly worked for Reuters and the NYT. Previously reporter for Reuters, May 26<sup>th</sup> 2015 (“China Warns of “Inevitable” War with US over South China Sea” Quartz, Available online at <http://www.defenseone.com/threats/2015/05/china-warns-inevitable-war-us-over-south-china-sea/113680/>] //CJC

After **Chinese state media warned that war with the United States may be “inevitable,”** Beijing has published a policy paper detailing **how the military will shift its focus from land and coastlines to the open seas.** China’s State Council released a white paper today that **criticizes “external countries...busy meddling in South China Sea affairs”** and sets out an “active defense” military strategy for the country.

**The paper comes a day after an editorial (link in Chinese) in the state-run Chinese tabloid Global Times said conflict between China and the US will be unavoidable if the Washington doesn’t lay off Beijing for building islands and military facilities in disputed parts of the South China Sea.**

“We do not want a military conflict with the United States, but if it were to come we have to accept it,” the paper said. (Editorials in state-run papers are not official representations of Beijing’s position, but often reflect government sentiment.)

The US has been calling on China to halt the construction of entire islands with ports, army barracks and at least one air strip near the Spratly Islands. **The area**—one of the world’s busiest shipping lanes and home to fertile fishing grounds as well as possibly oil and gas—**is the focus of overlapping claims by China, the Philippines, Malaysia, Vietnam,**

**Taiwan, and Brunei.** According to the white paper, **the People’s Liberation Army Navy will expand its defense perimeter to include “open seas protection.”** The air force will also expand its focus to include **offensive** as well as defensive **military capabilities.** “We will not attack unless we are attacked, but we will surely counterattack if attacked,” the paper said. Chinese authorities denied the white paper had anything to do with tension over US surveillance of China’s building in the Spratlys. On Monday, China’s foreign ministry said that it had filed a complaint with the US for flying a spy plane near Chinese island construction sites last week. International security experts have long said that armed conflict

between the two countries is unlikely given their economic reliance on each other. **Increasingly scholars and analysts say that war may not be “as improbable as many experts suggest” because of growing dominance of hardliners in the Chinese government, increased rivalry, or general lack of trust between the countries.** The US and other states are preparing for any potential confrontation. Southeast Asian countries are building up their navies and coastguards— defense spending in the region is expected to reach \$52 billion by 2020, up from a projected \$42 billion this year, IHS Janes Defence has said.

## **Conflict goes nuclear – can’t tell whether attacks are conventional or attempts to destroy other side’s nukes**

**Talmadge 16** – Caitlin Talmadge, Assistant Professor of Political Science and International Affairs at Elliot School of International Relations at George Washington University, February 2016 (“Preventing Nuclear Escalation in U.S.-China Conflict”, Institute for Security and Conflict Studies, [https://www.wilsoncenter.org/sites/default/files/china\\_policy\\_brief\\_talmadge\\_0.pdf](https://www.wilsoncenter.org/sites/default/files/china_policy_brief_talmadge_0.pdf))  
//CJC

Conventional war between the United States and China remains a low-probability event. **But if such a war were to break out, the risk of nuclear escalation**—that is, actual detonation of nuclear weapons—likely **would be higher** than many observers realize. Some **aspects of a likely U.S. campaign** in a conventional war against China could look to China like an attempt at conventional counterforce, **pressuring China to escalate to nuclear use while it still could.** This escalation scenario is distinct from other possible pathways to nuclear use. For example, **in the Cold War the classic scenario for escalation was pre-emption**, the notion that one side might try to use its nuclear weapons to pre-emptively destroy the arsenal of the other. Other scenarios for nuclear escalation include **mistaken launch** based on faulty warning information, **and unauthorized launch** by a commander who is physically able to use nuclear weapons but does not have political permission to do so. In addition, some states develop doctrines that deliberately threaten to escalate to the first use of nuclear weapons in the event of rapid conventional losses. **Nuclear escalation in response to an opponent’s perceived attempt at conventional counterforce constitutes an alternative** pathway to nuclear escalation. **It can arise when one side’s conventional military campaign infringes or appears poised to infringe on the other side’s ability to use or control its nuclear arsenal.** For example, conventional military attacks by one side against the other’s command and control networks, air defenses, early warning radars, submarines, and missile sites have the potential not only to degrade that side’s conventional capabilities but also its nuclear capabilities. After all, **command and control networks for conventional** forces may also be relevant to the control of nuclear weapons; air defense systems may protect both conventional **and nuclear assets**; early warning radars are relevant to both conventional and nuclear operations; attack submarines and ballistic missile submarines **share** shore-based **infrastructure, with the former often protecting the latter**; and the same sites can house both conventional and nuclear missiles (called co-location).  
For all of these reasons, **a state subject to attack on these targets may have a difficult time distinguishing whether the adversary is merely conducting a normal conventional campaign, or is seeking to neuter the state’s nuclear capabilities.** If the state fears the latter, it may wish to escalate to nuclear use while it still has the ability to do so. Such fears also could lead the state to engage in behaviors that make other pathways to escalation more likely. For example, the state could opt for more decentralized control of nuclear weapons, which would reduce vulnerability to conventional counterforce but heighten the danger of unauthorized launch.

## **Risk of US-Russia nuclear war is high now — miscalc, miscommunication, bad early warnings, and false alarms**

**Roth 16** [Nickolas Roth is a research associate at the Project on Managing the Atom in the Belfer Center for Science and International Affairs at Harvard Kennedy School, June 29 2016, “U.S. can’t ignore rising nuclear danger”, <http://www.cnn.com/2016/06/29/opinions/u-s-russia-nuclear-tensions-roth/>] //CJC

The reality is that **miscalculation or miscommunication** with another country **could result in catastrophe**. This is true at any time, but whoever is elected in November will assume office **during a period when the risk of nuclear confrontation between the United States and Russia may be higher than it has been in decades**. Both NATO and Russia have significantly bolstered their military presence and activities in Eastern Europe, **increasing the likelihood of a direct conflict** between the two sides. Indeed, **every military exercise and every near miss between a Russian jet and a U.S. warship is potentially a crisis in the making**. The United States and Russia have a long history of negotiated arms control agreements designed to manage nuclear weapons risks. But they also continue to pose an existential threat to one another. Each country targets the other with **hundreds of nuclear weapons that can be fired minutes after the order is made** and, **during a crisis, both sides have strong incentives to be the first to launch** a nuclear strike. **Further compounding the danger is the fact that Russia lacks effective early-warning systems** to help identify whether a nuclear attack is actually occurring. . If this sounds like a Stanley Kubrick fantasy, it isn't. In 1995, Russian radars indicated a Norwegian weather rocket might be a nuclear missile heading for Russia, and staff prepared Russian President Boris Yeltsin's nuclear command briefcase for possible retaliation (which fortunately did not occur). If this had happened during a major crisis, there is no telling what could have happened. The **probability of a substantial false alarm coming in the midst of a major crisis may be low, but the potential consequences are the destruction of most of human civilization, so action to reduce even low probabilities is justified**. Given such risks, the next president will need to find a balance between assertively protecting U.S. interests against Russian encroachments and exercising restraint so as to avoid potentially nuclear crises and itchy Russian trigger fingers. Getting the balance wrong could mean stumbling into unintended nuclear confrontation. This is a dauntingly difficult task, and will require new thinking. For the past 20 years, despite the end of the Cold War, **the United States has maintained high-risk nuclear weapons policies in part because U.S.-Russian relations were relatively good and a nuclear crisis seemed implausible**. **This dynamic has now changed -- there is significantly less margin of error for provocative nuclear policies today than at any time since the end of the Cold War**.

## **North Korea is continually about to collapse and could use nukes if collapse happens**

**Park 2016** [Sungtae Park is a research associate at the Council on Foreign Relations. “When a Collapsing, Paranoid North Korea Turns to Nukes”, *The National Interest*, <http://nationalinterest.org/feature/when-collapsing-paranoid-north-korea-turns-nukes-15201>] //CJC

On February 7, North Korea conducted another long-range missile test, disguised as a satellite launch. The test comes after a nuclear test on January 6 and a submarine-launched ballistic missile (SLBM) test in December of last year, indicating that the Kim Jong-un regime is intent on developing a secure and deliverable nuclear deterrent. If the regime achieves its objective, **North Korea could become the most dangerous nuclear-weapons state in the world, not because the Kim regime is irrational, but because North Korea is the only existing nuclear-weapons state that could conceivably collapse at any moment.** Then, U.S. policy makers will have to ask a very, very uncomfortable question: Should the United States come to terms with North Korea as a nuclear-weapons state and seek détente? The conventional logic with regard to nuclear deterrence rests on the principle that states are rational, care about self-preservation above all, and will not willingly commit suicide by attacking another state capable of exacting devastating retaliation. The general idea behind this school is that the destructive potential of nuclear weapons would more or less prevent their use and would reduce, if not eliminate, a state's incentive to start or escalate a destructive conflict. History has so far backed this argument. To be sure, there were the Berlin crises culminating in the Cuban missile crisis, the Able Archer exercise, the India-Pakistan crises and others, which nearly resulted in nuclear wars. Humanity may have been fortunate, rather than wise, with these crises. But strictly speaking, the fact is that nuclear deterrence, at least in today's world with a small number of nuclear-weapons states, has stood its ground so far. According to this principle, North Korea should not be much of a threat. After all, Pyongyang's motive for seeking a secure and deliverable nuclear arsenal is security, as the North Koreans themselves have stated many times. Of course, the Kim regime might launch provocations and even increase them with better nuclear capabilities. According to the logic of nuclear deterrence, however, Pyongyang will make rational calculations and will never escalate to a point where the regime would critically endanger its own security. Moreover, given North Korea's military and economic weakness, the country is in no shape to expand beyond its borders. Unlike China, for example, North Korea will never become a potential regional hegemon or a serious competitor to the United States. **But North Korea is not an ordinary nuclear-weapons state. The country is the only existing nuclear-weapons state that could see a sudden internal collapse.** Critics might argue that predictions about the regime's demise have been wrong before, but this logic does not stand: the fact that an event has not happened yet does not mean that the event will never happen. Indeed, the Iranian revolution began on January 7, 1978—one week after Jimmy Carter touted the country as "an island of stability." How about the Soviet Union, which Robert Gates, during the 1980s, said would never collapse during his or his children's lifetime? Then there is the Arab Spring, which caught the entire world by surprise. The common theme from these cases is that **regime instability could manifest itself before analysts realize that it might be possible.** Only with hindsight, can one point out why these uprisings happened at the time of their occurrence.

[...]

**In a collapse scenario, the Kim regime will also be making decisions under enormous psychological pressure and with a great sense of paranoia.** The regime understandably sees the United States as bent on seeking regime change in North Korea. The regime also fears that the collapse of the country and implosion of the Kim family's cult of personality might **not only mean loss of power, but loss of life,** as with the cases of Iraq's Saddam Hussein and Libya's Muammar Gaddafi. According to Andrei N. Lankov in his book, *The Real North Korea: Life and Politics in the Failed Stalinist Utopia*, a North Korean bureaucrat once said: "The human rights and the like might be a great idea, but if we start explaining it to our people, we will be killed in no time." Given the uniquely brutal nature of North Korea's totalitarianism, such sentiments are only rational. **During a collapse scenario, these psychological factors could greatly increase room for miscalculation or misperception for the Kim regime,** particularly if it loses hope for survival and lacks access to reliable information, **creating an environment that might even lead to the accidental launch of nuclear-tipped missiles.** If stable nuclear-weapons states had come close to using nuclear weapons multiple times before, what might a collapsing, paranoid North Korea do with its arsenal?

## **Trump causes cascading prolifer in Middle East and Asia**

Feith 16. [Douglas, Hudson Institute senior fellow, "Trump, america's word, and the bomb" National Review – March 14 -- [www.nationalreview.com/article/432746/donald-trump-nukes-his-recklessness-would-increase-nuclear-threats](http://www.nationalreview.com/article/432746/donald-trump-nukes-his-recklessness-would-increase-nuclear-threats)] //CJC



The Obama-Clinton team originally promised to strengthen nuclear non-proliferation. It wound up doing the opposite. **We now have the prospect of a Donald Trump presidency.** That would aggravate the problem. Eight years of left-wing American unreliability would then be followed by four (or eight) years of perceived right-wing unreliability. **Faith in American security commitments would plummet** — probably **irretrievably**. In many countries, **pressure to “go nuclear” would increase**, perhaps **irresistibly**. Nuclear weapons remain a life-and-death issue, though the candidates and the media are giving them little attention in the campaign. Americans shouldn't want nuclear weapons spreading around the world. When new states get them — especially rogues such as North Korea and Iran — **the risk of nuclear war increases**. Even if America could avoid being drawn into such a war, **catastrophic harm wouldn't be confined** to the warring parties. Since World War II, efforts to keep nuclear weapons from spreading have been astonishingly successful. When China got the bomb in 1964, it became only the fifth nuclear power, after the United States, the Soviet Union, Britain, and France. No one but an extreme optimist at the time would have predicted that, 50 years hence, the nuclear “club” would have only three (or maybe four) additional members. India, Pakistan, and North Korea have all explosively tested nuclear weapons. Israel is widely believed to have them but hasn't said so. Why did non-proliferation work so well? First, the United States and the Soviet Union actually shared interests in enforcing the 1970 Nuclear Non-Proliferation Treaty. Neither wanted any other country to obtain nuclear weapons. And most countries understood that they were actually safer if they renounced such weapons in return for a similar renunciation by their neighbors. The second main reason is that our allies trusted U.S. security commitments. They felt confident sheltering under America's so-called nuclear umbrella. Throughout the Cold War and beyond, U.S. presidents took pains to preserve that trust and confidence. To do so, they exerted leadership, showed loyalty to our allies, safeguarded U.S. credibility, and preserved American military power — in particular, the quality of our nuclear weapons. President Obama did speak passionately about reducing the risks of nuclear war, but his actions undermined his goals. He dithered as North Korea expanded its nuclear arsenal and the range of its missiles. He freed Iran of economic sanctions without requiring dismantlement of its nuclear-weapons facilities. Meanwhile, other policies — “leading from behind,” courtship of Russia's President Putin, setting and then ignoring that “red line” in Syria, slashing defense spending, and neglecting U.S. nuclear-weapons infrastructure — all communicated to America's friends abroad a lack of resolution, of loyalty, of understanding, and of power. The bad effects are plain to see. A May 7, 2015, Wall Street Journal headline reads, “Saudi Arabia Considers Nuclear Weapons to Offset Iran.” In South Korea on February 15 this year, Won Yoo-chul, the ruling party's floor leader, spoke favorably in parliament of “peaceful nuclear and missile programs for the sake of self-defense.” He explained, “We cannot borrow an umbrella from a neighbor whenever it rains.” Similar statements abound elsewhere. **Around the world, officials foresee with dread the possibilities of cascading nuclear proliferation. In the Middle East, not only Saudi Arabia but also the other Gulf states in addition to Turkey and Egypt could be candidates for going nuclear. In the Asia–Pacific, it could be Japan, Taiwan, Australia, Malaysia, Indonesia, and Singapore,** too. It's bad enough that President Obama has sapped American credibility. **If Republicans now put Donald Trump into the White House, they'll abandon all hope of recovering it.** Which brings us back to Donald Trump, who has had a lot to say about America's commitments to friends. He scorns NATO. He praises President Putin as NATO quarrels with Russia over Ukraine. In his 2000 book *The America We Deserve*, Trump wrote that Europe's conflicts were “not worth American lives,” and he touted the money America could save by “pulling back from Europe.” **He scorns Japan.** His statements on trade depict Japan as an enemy nation rather than an ally of paramount importance. He scorns Israel. He promises to be “neutral” between the Jewish state and enemies trying to destroy it. He scorns U.S. law-of-war obligations under the Geneva Conventions, as when he boasted he would mistreat detainees and kill civilians. He now recants those boasts, but he can't erase the picture he has created of himself as intemperate and unprincipled. He has made an electoral strategy of contradicting himself, purposefully devaluing the currency of his words (it's ironic that he berates the Chinese for devaluing their currency). He scoffs at accuracy and shows no shame when he says false things. His message is that, as a great man, he shouldn't be held to anything he says. It's bad enough that President Obama has sapped American credibility. **If Republicans now put Donald Trump into the White House, they'll abandon all hope of recovering it. Friends around the world would have to adjust to an America that's erratic to the point of recklessness. Their loss of confidence in our reliability would make the world more perilous** — and not just for them. **Undermining our alliances will spawn various ills, including the spread of nuclear weapons.** Even if Americans someday replaced President Trump with a responsible person of sound judgment, *the harm would probably be irreversible.*

## **Nuclear proliferation results in nuclear war—new nuclear states launch first because they think established nuclear powers are trying to take out their small arsenal**

**Kroenig**, Associate Professor and International Relations Field Chair at Georgetown, **2015** (Matthew Kroenig, Nonresident Senior Fellow, Brent Scowcroft Center on International Security, “The History of Proliferation Optimism: Does It Have a Future?”, *The Journal of Strategic*

The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there will be a catastrophic nuclear war. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used nuclear weapons on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to the 65-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again simply because they have not been used for some time. After all, analysts in the 1990s argued that worldwide economic downturns like the Great Depression were a thing of the past, only to be surprised by the dotcom bubble bursting later in the decade and the Great Recession of the late 2000s.<sup>48</sup> This author, for one, would be surprised if nuclear weapons are not used again sometime in his lifetime. Before reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons, neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preventive nuclear strike to disarm Iran's nuclear capabilities. Indeed, this incentive might be further increased by Israel's aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use them or lose them pressures. That is, in a crisis, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.<sup>49</sup> If there are advantages to striking first, one state might start a nuclear war in the belief that war is inevitable and that it would be better to go first than to go second. Fortunately, there is no historic evidence of this dynamic occurring in a nuclear context, but it is still possible. In an Israeli–Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, however, when both sides have secure, second-strike capabilities, there is still a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders who would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. Iran's theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who hold millenarian religious worldviews and could one day ascend to power. We cannot rule out the possibility that, as nuclear weapons continue to spread, some leader somewhere will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of

interest and leaders still seek to coerce nuclear armed adversaries. Leaders might, therefore, choose to launch a limited nuclear war.<sup>50</sup> This strategy might be especially attractive to states in a position of conventional inferiority that might have an incentive to escalate a crisis quickly to the nuclear level. During the Cold War, the United States planned to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO's conventional inferiority.<sup>51</sup> As Russia's conventional power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear weapons in its military doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan's military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a US superpower in a possible East Asia contingency. Second, as was also discussed above, **leaders can make a 'threat that leaves something to chance'.** <sup>52</sup> **They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increase the risk of nuclear war in an attempt to force a less resolved adversary to back down.** Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents nearly led to war.<sup>53</sup> When we think about future nuclear crisis dyads, such as Iran and Israel, with fewer sources of stability than existed during the Cold War, **we can see that there is a real risk that a future crisis could result in a devastating nuclear exchange.**

## **Pakistani nukes are easily stolen by terrorists**

**Schwartz 2015** (Benjamin [Worked at the Departments of State, Defense and Energy]; Right of Boom: The Aftermath of Nuclear Terrorism; The Overlook Press; p. 66-78] //CJC

The breakup of the Soviet Union presented an entirely unprecedented challenge: the redeployment of thousands of nuclear weapons and the dismantlement of hundreds of nuclear installations. It was this challenge that focused a great deal of attention on the danger of "loose nukes," another of Allison's "Three No's." In 1991, it also spurred Sam Nunn and Richard Lugar to launch the Cooperative Threat Reduction program, which has since provided a half billion dollars each year to improve the safety and security of Russia's unconventional arms. These funds allowed the United States to remove nuclear weapons from Belarus, Kazakhstan and Ukraine and financed the demolition of thousands of Soviet weapons, including missiles, submarines, bombers, and warheads. The Nunn-Lugar CTR program also paid the salaries of tens of thousands of Soviet weapons scientists, engineers, and technicians who were impoverished by the economic crises of the early 1990s and helped discourage them from working for American adversaries and governments of proliferation concern. <sup>20</sup> The growth of CTR efforts corresponded with a significant decline in seizures of illicit highly enriched uranium, partially enriched uranium, and plutonium sales on the black market. Between 1992 and 2002 there were at least eleven cases of HEU seizures and two plutonium seizures reported to the IAEA. In contrast, only four seizures occurred during nearly a decade between 2002 and 2012, and they were all associated with a single country- Georgia. While correlation certainly doesn't prove causation, these statistics are a strong indication of CTR's effectiveness and suggest that the threat of loose Soviet nukes and fissile materials has been largely contained. <sup>21</sup> Unfortunately, **the threat of "loose nukes" has shifted rather than declined.** Few have had greater access to information on this threat, and experience combating it, than Rolf Mowatt-Larssen. A twenty-three year veteran of the CIA's Clandestine Service, Mowatt-Larssen served multiple tours as a chief of station and rose to the agency's most powerful positions: chief of the European Division, chief of the Weapons of Mass Destruction Department, and chief of the Counterterrorism Center. After the September 11, 2001 attacks George Tenet, the director of the CIA, tapped Mowatt-Larssen to be at the point of the spear in America's response to the threat of nuclear terrorism. Mowatt-Larssen fulfilled this role first within the CIA and then from the basement of the Energy Department's headquarters as the director of its Office of Intelligence and Counterintelligence.<sup>22</sup> The centrality of Mowatt-Larssen's efforts is documented, among other places, in Tenet's memoir. After leaving government, Mowatt-Larssen articulated the problem in no uncertain terms: **"The greatest threat of a loose nuke scenario stems from insiders in the nuclear establishment working with outsiders, people seeking a bomb or material to make a bomb. Nowhere in the world is this threat greater than in Pakistan."** <sup>23</sup> Pakistan is distinguished by an extraordinary combination of malevolent ingredients. It is the only country ever to have both the founding father of the nation's nuclear weapons program and a lead nuclear weapons scientist independently develop clandestine networks to proliferate atomic weapons for profit. The latter, and better known of the two, Abdul Qadeer Khan, stole uranium enrichment technology while working at a centrifuge manufacturing company in the Nether lands during the 1970s, went on to develop Pakistan's uranium enrichment pathway to the bomb, and then proceeded to go into business for himself His clients included Iran, Libya, and North Korea. This became apparent to the world in dramatic fashion in January 2003 when US agents intercepted a German ship named the BBC China that was transporting a large stash of nuclear weapons components to Libya. Libyan officials later admitted to having reached an agreement with Khan Research Laboratories to provide \$100 million in exchange for a "complete store-bought nuclear weapons program."<sup>24</sup> Khan also built upon Pakistan's long-standing relationship with North Korea in the field of missile technology to provide that country with dozens of centrifuges.<sup>25</sup> As early as 1987, Khan also sold to the Iranians and eventually provided them P-1 centrifuges, schematics of advanced P-2 designs, and hundreds of sensitive nuclear components.<sup>26</sup> Despite his public confession in 2004, Khan remains a hero to the vast majority of Pakistanis, a political reality that compelled president Pervez Musharraf to pardon Khan for his crimes. Pakistan's other premier proliferator, Bashiruddin Mahmood, is less well known but was also a stalwart of the nuclear program during the 1970s; he occupies the singular position of being the most

senior scientist to liaison directly with al-Qaeda. The chief designer and director of Pakistan's Khushab Plutonium Production Reactor, Mahmood retired from government service in 1999 and founded a nongovernmental organization called Umma Tameer-e-Nau (UTN; Reconstruction for the Islamic Community). The leadership of UTN was made up of retired Pakistani nuclear scientists, military officers, engineers, and technicians, including Chaudhry Abdul Majid, who had been a nuclear fuel expert at the Pakistan Institute of Nuclear Science and Technology. In the summer of 2001, Mahmood and Majid traveled to Afghanistan under the cover of the UTN in order to discuss nuclear weapons with mullah Mohammed Omar and Osama bin Laden. According to former director of the Central Intelligence Agency George Tenet, Mahmood was thought of as something of a madman by many of his former colleagues in the Pakistan nuclear establishment. In 1987 he published a book called "Doomsday and Life After Death: the

Ultimate Faith of the Universe as Seen by the Holy Quran." It was a disturbing tribute to his skewed view of the role of science in jihad. The book's basic message from the

leader of a group that has offered WMD capabilities to AQ [al-Qaeda] -was that the world would end one day soon in the fire of nuclear holocaust that would usher in judgment day and thus fulfill the prophecies of the Quran ... Mahmood and Majid were detained after a tip from a foreign intelligence service

prompted the CIA to inform the Pakistani government of their actions. The two scientists admitted to the meetings, noted that bin Laden was interested in nuclear weapons and that Majid had drawn a rough sketch of an improvised nuclear device for him, but denied that they assisted al-Qaeda. Despite failing several polygraph tests and a statement from Libya's head of intelligence claiming that the UTN had tried to sell Libya a nuclear bomb, the two scientists were soon released.<sup>27</sup> According to Tenet, the United States "knew that UTN enjoyed some measure of support from Pakistani military officers ... notably the former director of Pakistani intelligence service, Gen. Hamid Gul."<sup>28</sup> **A second factor that makes the nuclear terrorism**

**threat from Pakistan especially acute is its track record as a sanctuary and a patron of terrorist organizations.** Even before Pakistan became a state after the partition of British India, its advocates decided that

securing an Islamic polity required an investment in asymmetric proxies. India was destined to have conventional military superiority, so the Muslims of the subcontinent from the start invested in unconventional warfare. From the bloody battles of partition through the present day, the Pakistani military cultivated radicals, which for the first few decades were overwhelmingly Pathans/Pashtuns, but in recent time have come to include Punjabis as well. This isn't a temporary fad; it is an embedded component of Pakistan's national security system. The ability of Osama bin Laden to enjoy approximately a decade of hospitality

just miles from Pakistan's premier military university likely had more to do with the sympathies of

a handful of people than official policy, but his presence was entirely consistent with Pakistani support for radical

jihadist groups such as Lashkar-e-Jhangvi, Lashkar-e-Taiba, the Haqqani Network, and the Afghan Taliban, among others.<sup>29</sup> Third, and likely related, **Pakistani public opinion polls consistently show widespread antipathy**

**toward the United States and sympathy for jihadist organizations.** As of June 2012, 75 percent

considered the United States "an enemy."<sup>30</sup> Significant segments of the public not only hold anti-American views but

also subscribe to radical militant ideology that is manifest in violence against Christians, Shi'ites (of which 375 were killed in 2012 alone), symbols of secularism, and even the Pakistani government. The assassination in 2011 of Pakistan's only Christian minister, Shahbaz Bhatti, was indicative of this trend, but even more alarming than the murder was the subsequent outburst of public support for the assassin. Thousands of demonstrators celebrated the "execution," which they claimed was justified by Bhatti's efforts to reform Pakistan's blasphemy laws, which impose the death penalty for insulting Islam. Before former prime minister Benazir Bhutto was murdered in 2007, she expressed a belief that al-Qaeda would march on Islamabad in a matter of years.<sup>31</sup> These attitudes are worth bearing in mind in the context of another statistic: the approximately nine thousand civilian scientists, including two thousand who reportedly possess "critical knowledge" of weapons manufacturing and maintenance who work in Pakistan's nuclear complexes.<sup>32</sup> There is arguably no published figure more qualified to comment on Pakistan's nuclear weapons program than Feroz Khan, who served for thirty years in the Pakistani military and occupied senior positions at Pakistan's Strategic Plans Division, the country's nuclear decision-making and command-and-control apparatus. Regarding the insider threat Khan has said, "**Pakistan**

**faces two fundamental challenges in establishing its personnel reliability requirements.**

First, religious extremism is increasing in Pakistani society as a whole .... Second, because

**Pakistan does not have sophisticated technological controls over personnel, it has to rely**

on the rationality and loyalty of individuals . . . ."<sup>33</sup> These words don't inspire a great deal of confidence. A fourth

development of serious concern is that radical ideology and radical organizations inevitably have spawned radical violence in Pakistan. According to Bruce Reidel, a CIA veteran and former lead Pakistan analyst for the Obama administration, government insiders have facilitated multiple terrorist attacks against the Pakistani state, including suicide bombings at air force bases that

house nuclear weapons storage sites.<sup>34</sup> In 2011, Jeffrey Goldberg reported in the Atlantic that at least **six facilities widely**

**believed to be associated with Pakistan's nuclear program had already been targeted by**

**militants.** The Pakistani military's inability to protect its own assets was demonstrably apparent in early 2011 when it took forces

over fifteen hours to regain control of a major Pakistani naval base near Karachi after militants overran it, destroyed two P-3C Orion surveillance planes and killed ten people.<sup>35</sup> These events, alongside a variety of other negative economic indicators, led Stephen

Cohen, a leading expert on the country, to conclude, "The fundamentals of the state are either failing or questionable, and this applies to both the idea of Pakistan, the ideology of the state, the purpose of the state, and also to the coherence of the state itself. I wouldn't predict a comprehensive failure soon, but clearly that's the direction in which Pakistan is moving."<sup>36</sup> Fifth and most

alarming, **Pakistan's nuclear arsenal and its nuclear doctrine are undergoing changes that exponentially expand the risk of terrorist acquisition of a nuclear weapon**. With respect to sheer size, **Pakistan was on track to displace France as the world's fourth largest nuclear weapons power**