



***BETTER NOW THAN LATER: THE US
NUCLEAR ENTERPRISE ON FORCE
MODERNIZATION***

BY *ETHAN KESSLER*

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I virtually attended the “[Anticipating the Next Chapter in US Nuclear Deterrence Strategy](#)” workshop, put on by the Lawrence Livermore National Laboratory's [Center for Global Security Research](#) (CGSR), from November 1-2, 2022, through the Pacific Forum Young Leaders program. Below, I highlight a theme that ran throughout the conference, which was a kind of summary poll of America's nuclear enterprise: modernizing America's nuclear forces is an urgent national security requirement because Russia and China have altered the nuclear landscape. Though not covered here, CGSR has papers on the [details](#) of [modernization](#) online.

Russia and China are straining US nuclear capabilities

The concern with US nuclear forces begins with the mission they serve. The reason the US nuclear arsenal goes far beyond what is needed to deter an attack on the US homeland is the US commitment to maintaining the territorial status quo in western Europe and northeast Asia. This commitment is expressed in treaty obligations going back to 1949 with countries in Europe and Asia. In many cases, these allies are conventionally weak and too far away for enough US conventional forces to be on standby –

think of the central European countries who faced down a far larger Red Army during the Cold War, or the initially weak South Korean military that faced larger North Korean and Chinese forces after the Korean War. So, US nuclear weapons “extend” US deterrence far away from the US homeland.

None of the longstanding US treaty commitments in Europe or Asia from the Cold War, with the exception of Taiwan and New Zealand, have been rescinded. In fact, coverage under the US nuclear umbrella has only expanded, as NATO has expanded north and east. If Finland and Sweden's membership bids go through, the US will have 31 allies in NATO.

Meanwhile, the two largest regional threats to these treaty allies – Russia and China – have only enhanced their nuclear capabilities. This means, according to the recently released [2022 Nuclear Posture Review](#), that “the United States will, for the first time in its history, face two major nuclear powers as strategic competitors and potential adversaries.” This is a novel situation because China has kept its nuclear arsenal notably small [until recently](#) and, before its rapid economic growth in the last few decades, was too poor to change that. Russia, for its part, has introduced delivery systems to maintain mutual vulnerability with Washington despite US conventional advantages, which will only grow as more Russian combat power is consumed in Ukraine. These systems include maneuverable hypersonic missiles and a nuclear-powered thermonuclear [torpedo](#). Moreover, according to the 2018 [Nuclear Posture Review](#), Russia “possesses significant advantages in its nuclear weapons production capacity...over the US.” Some in the nuclear enterprise contend that these changes leave Washington in a bad position. Simply by way of keeping its existing arsenal, the United States has fallen behind; it has only expanded its portfolio of defense burdens while Russia and China have become more formidable.

The Military Mindset: Worst-Case Scenarios

Having two nuclear peers is significant if one considers the worst-case scenario: [simultaneous wars](#) with Russia and China. As a panel on this specific contingency during the workshop made clear, this

could arise either out of a full alliance between the two or uncoordinated opportunism, whereby one of the countries would launch a war in its region and the other would separately do the same after seeing Washington bogged down. The 2022 Nuclear Posture Review calls this “[opportunistic aggression](#),” and says the US Joint Force needs to be able to deter and defeat it.

While one could deride this contingency as unlikely, the soldier’s duty is to plan for worst-case scenarios. With regard to Russia and China, those scenarios are mainly an attack on NATO allies and an invasion of Taiwan, respectively. Though it is unlikely, Russia *could* attack and/or invade the Baltics or other eastern NATO states. Though it is unlikely in the next few years, China *could* invade Taiwan. Either contingency, especially the latter, would tax US forces severely if Washington chose to militarily respond. Would there be enough US power left over to deter the other adversary? It is not as if the United States is a stranger to worst-case scenarios. In 1941, Imperial Japan took advantage of the Nazis’ occupation of the Netherlands and war with the United Kingdom to annex Dutch and British colonial holdings in southeast Asia.

Furthermore, planning for the worst-case scenario is arguably more reasonable now than at any other time since the end of the Cold War. Russia’s invasion of Ukraine, extensive US backing of Ukraine, and increasingly credible Chinese threats against Taiwan make Russo-Chinese opportunistic aggression imaginable. Beijing and Moscow’s shared interest in countering Washington recalls the strategic triangle of the 1980s, when the United States was aligned with China against the Soviet Union – only now, Washington is in the solo chair once occupied by Moscow and now faces two, not one, nuclear peers.

Worst-Case Planning as US Conventional Forces Weaken

Worst-case scenario planning is further encouraged by China’s growing conventional capabilities vis-à-vis the United States in the western Pacific, another concern of defense [writers](#) and [think tankers](#). US conventional forces are poised to grow relatively weaker in the 2030s because readiness, operations,

and maintenance – not modernization and procurement – have been prioritized over the last two decades of counterterrorist and counterinsurgency operations.

The result: key US conventional capabilities such as stealth bombers and attack submarines are still lacking in the numbers needed to go toe-to-toe with China over Taiwan, and replacements for these capabilities will begin rolling off assembly lines too late. The recently unveiled B-21 stealth bomber, which will replace the B-2, is expected to enter US service only in the mid- to late-2020s. More importantly for a potential US intervention in a Chinese invasion of Taiwan, the US [attack submarine fleet](#) will bottom out at 42 boats in the late 2020s to early 2030s as older Los Angeles-class submarines are retired at a faster rate than new Virginia-class submarines are built.

This is especially unfortunate for the US policy of maintaining the status quo in East Asia, which (if we assume the worst of Chinese intentions) requires deterring Beijing from invading Taiwan. Weaknesses in US stealth bomber and attack submarine forces will coincide with enhancements in comparable Chinese forces, as Beijing’s investments in modernization and procurement from the early 2010s pay out. The net effect: the precarious US nuclear position will grow even more precarious. Earlier in November, at the Naval Submarine League’s 2022 Annual Symposium & Industry Update, commander of US Strategic Command Adm. Chas Richard [said](#), “As I assess our level of deterrence against China, the ship is slowly sinking. It is sinking slowly, but it is sinking, as fundamentally they are putting capability in the field faster than we are.”

To be sure, the worst-case scenario of simultaneous wars with nuclear peer adversaries is not the only option. But given US commitments, it makes sense to prepare for it. If one doesn’t want to prepare for it (maybe because they don’t want to build a military capable of fighting two great-power wars at once), that requires political actions – like reducing tensions with adversaries or ending alliance commitments – far above the consideration of the soldier or the nuclear planner.

Conclusion

In [Book Nine](#) of the Iliad, the Greeks try unsuccessfully to woo Achilles back into fighting beside them against the Trojans. One Greek tells Achilles the tale of Meleager, who did not fight for his city when offered great treasures by his people but came around later, when the enemy was at the gates. For his dithering, Meleager never received the spoils his people promised. The nature of his mistake is obvious, yet it is repeated over and over in war. Last fall, Vladimir Putin called a military mobilization to strengthen his hand in Russia's war against Ukraine – a decision that would have been just as costly yet far more productive had he done it half a year prior.

If the CGSR workshop was any indication, the US nuclear enterprise does not want to repeat the tragedy of Meleager. The United States increasingly faces more capable peer nuclear adversaries while it keeps its nuclear umbrella wide and faces conventional force setbacks. If it wants to plan for the worst – simultaneous wars – the need to prioritize nuclear force modernization is obvious. Better now than later.

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