

Indeed, military tensions between the two countries have been rising in the western Pacific since the summer of 2010. Just as Washington once used its wartime alliance with Great Britain to appropriate much of that fading empire's global power after World War II, so Beijing began using profits from its export trade with the U.S. to fund a military challenge to its dominion over the waterways of Asia and the Pacific.

Some telltale numbers suggest the nature of the future great power competition between Washington and Beijing that could determine the course of the twenty-first century. In April 2015, for instance, the Department of Agriculture [reported](#) that the U.S. economy would grow by nearly 50% over the next 15 years, while China's would expand by 300%, equaling or surpassing America's around 2030.

Similarly, in the critical race for worldwide patents, American leadership in technological innovation is clearly on the wane. In 2008, the United States still held the number two spot behind Japan in patent applications with 232,000. China was, however, [closing](#) in fast at 195,000, thanks to a blistering 400% increase since 2000. By 2014, China actually took the [lead](#) in this critical category with 801,000 patents, nearly half the world's total, compared to just 285,000 for the Americans.

With supercomputing now critical for everything from code breaking to consumer products, China's Defense Ministry [outpaced](#) the Pentagon for the first time in 2010, launching the world's fastest supercomputer, the Tianhe-1A. For the next six years, Beijing produced the fastest machine and last year finally [won](#) in a way that couldn't be more crucial: with a supercomputer that had microprocessor chips made in China. By then, it also had the most supercomputers with 167 compared to 165 for the United States and only 29 for Japan.

Over the longer term, the American education system, that critical source of future scientists and innovators, has been falling behind its competitors. In 2012, the Organization for Economic Cooperation and Development tested half a million 15-year-olds worldwide. Those in Shanghai [came in first](#) in math and science, while those in Massachusetts, "a strong-performing U.S. state," placed 20th in science and 27th in math. By 2015, America's standing had [declined](#) to 25th in science and 39th in math.

But why, you might ask, should anybody care about a bunch of 15-year-olds with backpacks, braces, and attitude? Because by 2030, they will be the mid-career scientists and engineers determining whose computers survive a cyber attack, whose satellites evade a missile strike, and whose economy has the next best thing.

Rival Superpower Strategies

With its growing resources, Beijing has been laying claim to an arc of islands and waters from Korea to Indonesia long dominated by the U.S. Navy. In August 2010, after Washington expressed a "national interest" in the South China Sea and conducted naval exercises there to reinforce the claim, Beijing's *Global Times* [responded](#) angrily that "the U.S.-China wrestling match over the South China Sea issue has raised the stakes in deciding who the real future ruler of the planet will be."

Four years later, Beijing escalated its territorial claims to these waters, [building](#) a nuclear submarine facility on Hainan Island and [accelerating](#) its dredging of seven artificial atolls for military bases in the Spratly Islands. When the Permanent Court of Arbitration at The Hague [ruled](#), in 2016, that these atolls gave China no territorial claim to the surrounding

seas, Beijing's Foreign Ministry [dismissed](#) the decision out of hand.

To meet China's challenge on the high seas, the Pentagon began [sending](#) a succession of carrier groups on "freedom of navigation" cruises into the South China Sea. It also started shifting spare air and sea assets to a string of bases from Japan to Australia in a bid to strengthen its strategic position along the Asian littoral. Since the end of World War II, Washington has attempted to control the strategic Eurasian landmass from a network of NATO military bases in Europe and a chain of island bastions in the Pacific. Between the "[axial ends](#)" of this vast continent, Washington has, over the past 70 years, built successive layers of military power — air and naval bases during the Cold War and more recently a string of 60 drone bases stretching from Sicily to Guam.

Simultaneously, however, China has conducted what the Pentagon in 2010 [called](#) "a comprehensive transformation of its military" meant to prepare the People's Liberation Army (PLA) "for extended-range power projection." With the world's "most active land-based ballistic and cruise missile program," Beijing can target "its nuclear forces throughout... most of the world, including the continental United States." Meanwhile, accurate missiles now provide the PLA with the ability "to attack ships, including aircraft carriers, in the western Pacific Ocean." In emerging military domains, China has begun to contest U.S. dominion over cyberspace and space, with plans to dominate "the information spectrum in all dimensions of the modern battlespace."

China's army has by now developed a sophisticated cyberwarfare [capacity](#) through its Unit 61398 and allied contractors that "increasingly focus... on companies involved in the critical infrastructure of the United States — its electrical power grid, gas lines, and waterworks." After identifying that unit as responsible for a series of intellectual property thefts, Washington took the unprecedented step, in 2013, of filing criminal charges against five active-duty Chinese cyber officers.

China has already made major technological advances that could prove decisive in any future war with Washington. Instead of competing across the board, Beijing, like many late adopters of technology, has strategically chosen key areas to pursue, particularly orbital satellites, which are a fulcrum for the effective weaponization of space. As early as 2012, China had already launched 14 satellites into "three kinds of orbits" with "more satellites in high orbits and... better anti-shielding capabilities than other systems." Four years later, Beijing [announced](#) that it was on track to "cover the whole globe with a constellation of 35 satellites by 2020," becoming second only to the United States when it comes to operational satellite systems.

Playing catch-up, China has recently achieved a bold breakthrough in secure communications. In August 2016, three years after the Pentagon abandoned its own attempt at full-scale satellite security, Beijing [launched](#) the world's first quantum satellite that transmits photons, believed to be "invulnerable to hacking," rather than relying on more easily compromised radio waves. According to one scientific [report](#), this new technology will "create a super-secure communications network, potentially linking people anywhere." China was reportedly planning to launch 20 of the satellites should the technology prove fully successful.

To check China, Washington has been building a new digital defense network of advanced cyberwarfare capabilities and air-space robotics. Between 2010 and 2012, the Pentagon

extended drone operations into the exosphere, creating an arena for future warfare unlike anything that has gone before. As early as 2020, if all goes according to plan, the Pentagon will loft a [triple-tier shield](#) of unmanned drones reaching from the stratosphere to the exosphere, armed with agile missiles, linked by an expanded satellite system, and operated through robotic controls.

Weighing this balance of forces, the RAND Corporation recently released a study, *War with China*, [predicting](#) that by 2025

“China will likely have more, better, and longer-range ballistic missiles and cruise missiles; advanced air defenses; latest generation aircraft; quieter submarines; more and better sensors; and the digital communications, processing power, and C2 [cyber security] necessary to operate an integrated kill chain.”

In the event of all-out war, RAND suggested, the United States might suffer heavy losses to its carriers, submarines, missiles, and aircraft from Chinese strategic forces, while its computer systems and satellites would be degraded thanks to “improved Chinese cyberwar and ASAT [anti-satellite] capabilities.” Even though American forces would counterattack, their “growing vulnerability” means Washington’s victory would not be assured. In such a conflict, the think tank concluded, there might well be no “clear winner.”

Make no mistake about the weight of those words. For the first time, a top strategic think-tank, closely aligned with the U.S. military and long famous for its influential strategic analyses, was seriously contemplating a major war with China that the United States would not win.

World War III: Scenario 2030

The technology of space and cyberwarfare is so new, so untested, that even the most outlandish scenarios currently concocted by strategic planners may soon be superseded by a reality still hard to conceive. In a 2015 nuclear war [exercise](#), the Air Force Wargaming Institute used sophisticated computer modeling to [imagine](#) “a 2030 scenario where the Air Force’s fleet of B-52s... upgraded with... improved standoff weapons” patrol the skies ready to strike. Simultaneously, “shiny new intercontinental ballistic missiles” stand by for launch. Then, in a bold tactical gambit, B-1 bombers with “full Integrated Battle Station (IBS) upgrade” slip through enemy defenses for a devastating nuclear strike.

That scenario was no doubt useful for Air Force planners, but said little about the actual future of U.S. global power. Similarly, the RAND *War with China* study only compared military capacities, without assessing the particular strategies either side might use to its advantage.

I might not have access to the Wargaming Institute’s computer modeling or RAND’s renowned analytical resources, but I can at least carry their work one step further by imagining a future conflict with an unfavorable outcome for the United States. As the globe’s still-dominant power, Washington must spread its defenses across all military domains, making its strength, paradoxically, a source of potential weakness. As the challenger, China has the asymmetric advantage of identifying and exploiting a few strategic flaws in Washington’s otherwise overwhelming military superiority.

For years, prominent Chinese defense intellectuals like [Shen Dingli](#) of Fudan University have rejected the idea of countering the U.S. with a big naval build-up and [argued](#) instead for “cyberattacks, space weapons, lasers, pulses, and other directed-energy beams.” Instead of rushing to launch aircraft carriers that “will be burned” by lasers fired from space, China should, Shen argued, develop advanced weapons “to make other command systems fail to work.” Although decades away from matching the full might of Washington’s global military, China could, through a combination of cyberwar, space warfare, and supercomputing, find ways to cripple U.S. military communications and thus blind its strategic forces. With that in mind, here’s one possible scenario for World War III:

It’s 11:59 p.m. on Thanksgiving Thursday in 2030. For months, tensions have been mounting between Chinese and U.S. Navy patrols in the South China Sea. Washington’s attempts to use diplomacy to restrain China have proven an embarrassing failure among long-time allies — with NATO crippled by years of diffident American support, Britain now a third-tier power, Japan functionally neutral, and other international leaders cool to Washington’s concerns after suffering its cyber-surveillance for so long. With the American economy diminished, Washington plays the last card in an increasingly weak hand, deploying six of its remaining eight carrier groups to the Western Pacific.

Instead of intimidating China’s leaders, the move makes them more bellicose. Flying from air bases in the Spratly Islands, their jet fighters soon begin buzzing U.S. Navy ships in the South China Sea, while Chinese frigates play chicken with two of the aircraft carriers on patrol, crossing ever closer to their bows.

Then tragedy strikes. At 4:00 a.m. on a foggy October night, the massive carrier USS *Gerald Ford* slices through aging Frigate-536 *Xuchang*, sinking the Chinese ship with its entire crew of 165. Beijing demands an apology and reparations. When Washington refuses, China’s fury comes fast.

At the stroke of midnight on Black Friday, as cyber-shoppers storm the portals of Best Buy for deep discounts on the latest consumer electronics from Bangladesh, Navy personnel staffing the [Space Surveillance Telescope](#) at Exmouth, Western Australia, choke on their coffees as their panoramic screens of the southern sky suddenly blip to black. Thousands of miles away at the U.S. CyberCommand’s operations center in Texas, Air Force technicians detect malicious binaries that, though hacked anonymously into American weapons systems worldwide, show the distinctive [digital fingerprints](#) of China’s People’s Liberation Army.

In what historians will later call the “Battle of Binaries,” CyberCom’s supercomputers launch their killer counter-codes. While a few of China’s provincial servers do lose routine administrative data, Beijing’s quantum satellite system, equipped with super-secure photon transmission, proves impervious to hacking. Meanwhile, an armada of bigger, faster supercomputers slaved to Shanghai’s cyberwarfare Unit 61398 blasts back with impenetrable logarithms of unprecedented subtlety and sophistication, slipping into the U.S. satellite system through its antiquated microwave signals.

The first overt strike is one nobody at the Pentagon predicted. Flying at 60,000 feet above the South China Sea, several U.S. carrier-based MQ-25 Stingray [drones](#), infected by Chinese “malware,” suddenly fire all the pods beneath their enormous delta wingspans, sending dozens of lethal missiles plunging harmlessly into the ocean, effectively disarming those formidable weapons.

Determined to fight fire with fire, the White House authorizes a retaliatory strike. Confident their satellite system is impenetrable, Air Force commanders in California transmit robotic codes to a flotilla of X-37B [space drones](#), orbiting 250 miles above the Earth, to launch their Triple Terminator missiles at several of China's communication satellites. There is zero response.

In near panic, the Navy orders its Zumwalt-class destroyers to fire their RIM-174 [killer missiles](#) at seven Chinese satellites in nearby geostationary orbits. The launch codes suddenly prove inoperative.

As Beijing's viruses spread uncontrollably through the U.S. satellite architecture, the country's second-rate supercomputers fail to crack the Chinese malware's devilishly complex code. With stunning speed, GPS signals crucial to the navigation of American ships and aircraft worldwide are compromised.

Across the Pacific, Navy deck officers scramble for their sextants, struggling to recall long-ago navigation classes at Annapolis. Steering by sun and stars, carrier squadrons abandon their stations off the China coast and steam for the safety of Hawaii.

An angry American president orders a retaliatory strike on a secondary Chinese target, Longpo Naval Base on Hainan Island. Within minutes, the commander of Andersen Air Base on Guam launches a battery of super-secret X-51 "Waverider" [hypersonic missiles](#) that soar to 70,000 feet and then streak across the Pacific at 4,000 miles per hour — far faster than any Chinese fighter or air-to-air missile. Inside the White House situation room the silence is stifling as everyone counts down the 30 short minutes before the tactical nuclear warheads are to slam into Longpo's hardened submarine pens, shutting down Chinese naval operations in the South China Sea. Midflight, the missiles suddenly nose-dive into the Pacific.

In a bunker buried deep beneath Tiananmen Square, **President Xi Jinping's** handpicked successor, **Li Keqiang**, even more nationalistic than his mentor, is outraged that Washington would attempt a tactical nuclear strike on Chinese soil. When China's State Council wavers at the thought of open war, the president quotes the ancient strategist **Sun Tzu**:

"Victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win."

Amid applause and laughter, the vote is unanimous. War it is!

Almost immediately, Beijing escalates from secret cyberattacks to overt acts. Dozens of China's next-generation SC-19 missiles lift off for strikes on key American communications satellites, scoring a high ratio of kinetic kills on these hulking units. Suddenly, Washington loses secure communications with hundreds of military bases. U.S. fighter squadrons worldwide are grounded. Dozens of F-35 pilots already airborne are blinded as their helmet-mounted avionic displays go black, forcing them down to 10,000 feet for a clear view of the countryside. Without any electronic navigation, they must follow highways and landmarks back to base like bus drivers in the sky.

Midflight on regular patrols around the Eurasian landmass, two-dozen RQ-180 surveillance

drones suddenly become unresponsive to satellite-transmitted commands. They fly aimlessly toward the horizon, crashing when their fuel is exhausted. With surprising speed, the United States loses control of what its Air Force has long [called](#) the “ultimate high ground.”

With intelligence flooding the Kremlin about crippled American capacity, Moscow, still a close Chinese ally, sends a dozen Severodvinsk-class nuclear submarines beyond the Arctic Circle bound for permanent, provocative patrols between New York and Newport News. Simultaneously, a half-dozen Grigorovich-class missile frigates from Russia’s Black Sea fleet, escorted by an undisclosed number of attack submarines, steam for the western Mediterranean to shadow the U.S. Sixth fleet.

Within a matter of hours, Washington’s strategic grip on the axial ends of Eurasia — the keystone to its global dominion for the past 85 years — is broken. In quick succession, the building blocks in the fragile architecture of U.S. global power start to fall.

Every weapon begets its own nemesis. Just as musketeers upended mounted knights, tanks smashed trench works, and dive bombers sank battleships, so China’s superior cybercapability had blinded America’s communication satellites that were the sinews of its once-formidable military apparatus, giving Beijing a stunning victory in this war of robotic militaries. Without a single combat casualty on either side, the superpower that had dominated the planet for nearly a century is defeated in World War III.

Alfred W. McCoy, a [TomDispatch regular](#), is the Harrington professor of history at the University of Wisconsin-Madison. He is the author of the now-classic book *The Politics of Heroin: CIA Complicity in the Global Drug Trade*, which probed the conjuncture of illicit narcotics and covert operations over 50 years, and the just-published [In the Shadows of the American Century: The Rise and Decline of U.S. Global Power](#) (Dispatch Books) from which this piece is adapted.

Featured image is from [American Herald Tribune](#).

The original source of this article is [TomDispatch](#)
Copyright © [Prof Alfred McCoy](#), [TomDispatch](#), 2017

[Comment on Global Research Articles on our Facebook page](#)

[Become a Member of Global Research](#)

Articles by: **[Prof Alfred McCoy](#)**

Disclaimer: The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long as the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: publications@globalresearch.ca
www.globalresearch.ca contains copyrighted material the use of which has not always been specifically authorized by the

copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: publications@globalresearch.ca