# AI Domain Awareness/Subs Neg --- BFHR

# DA/Case Turns

## Ptix DA

### 1NC---L---Unpopular

#### Congress hates increasing funding for submarines

**Larter 19** [David Larter, David B. Larter was the naval warfare reporter for Defense News. Before that, he reported for Navy Times., 12-19-2019, accessed on 7-5-2022, Defense News, "Congress slashes funding for the Navy’s LCS sensors — again", <https://www.defensenews.com/naval/2019/12/19/congress-slashes-funding-for-the-navys-lcs-sensors-again/> mimou]

WASHINGTON — Congress again [slashed funding for the littoral combat ship](https://www.defensenews.com/naval/2018/09/18/congress-to-buy-3-more-lcs-than-the-navy-needs-but-gut-funding-for-sensors-that-makes-them-valuable/)’s mission modules in this year’s defense appropriations bill, which will likely create further delays in fielding capabilities designed to plug into the hulls that would enable the ships to hunt submarines or destroy mines — the missions they were built to perform in the first place.

With 35 ships funded, Congress has every year since at least 2015 cut funding to the long-delayed [mission modules](https://www.defensenews.com/naval/2018/12/05/us-navys-littoral-combat-ship-program-inches-closer-to-fielding-new-capabilities/). As the program is currently structured, each ship is either a mine sweeper, submarine hunter or small anti-surface combatant, all made possible by mission modules still under development.

Appropriators are set to slice 77 percent from the Navy’s mine countermeasures module, shuffling part of it to another section of the budget. But the bulk of that slicing involves cuts to Knifefish minesweeping drones and unmanned surface vehicles that are intended to deploy sensors, according to a readout supplied by appropriators.

The surface warfare mission module, which has partially met its initial operational capability goal but not fully, saw a 45 percent cut, or $12 million, coming from surface-to-surface missile modules. And the anti-submarine warfare mission module saw a more modest 11 percent cut to address cost overruns with the variable depth sonar.

In total, Congress slashed about $145.5 million from the mission modules when you include general equipment that comes with all the modules, or 52 percent of the total Navy request.

### 2NC --- Plan Unpop

#### Plans for new AI submarines are widely unpopular

**Gooding 22** [Mike Gooding, Mike is the senior military and political reporter at 13news now, 5-13-2022, accessed on 7-5-2022, 13newsnow.com, "Navy 'not sized' to handle two wars at once: CNO", https://www.13newsnow.com/article/news/national/military-news/chief-naval-operations-says-navy-not-prepared-to-handle-two-wars-at-once/291-89e465f9-1f34-4748-b1a6-a2980ace86c1 mimou]

The current fleet stands at 298 ships. However, Gilday told the Senate Armed Services Committee on Thursday that he supports the Biden Administrations' proposal to reduce the fleet to 280 ships by 2027.

Gilday said it's smarter to invest now in newer, more sophisticated and more lethal ships, rather than wasting money on older, less capable vessels.

"We cannot field a fleet larger than one we can sustain," he said. "And in today's fiscal levels, quantity simply cannot substitute for quality."

Committee Republicans slammed the Navy's FY23 budget proposal and its new 30-year Shipbuilding Plan.

Sen. James Inhofe (R-Oklahoma) called the budget "inadequate." Sen. Josh Hawley (R- Missouri) said it is "disturbing" that only one of the Navy's three 30-year shipbuilding plan options would get the Navy to the Congressionally-mandated level of 355 ships by 2052.

"I mean, if that's not a wake-up call to the committee, I don't know what is," he said.

#### Democrats and republicans both hate the plan

**Cohen 22** [Steve Cohen, Mr. Cohen is an attorney at Pollock Cohen in New York. He is a former member of the Board of Directors of the United States Naval Institute., 4-2-2022, accessed on 7-5-2022, New York The Sun, "Don’t Sink the Navy To Save It", https://www.nysun.com/article/dont-sink-the-navy-to-save-it mimou]

The Navy just [submitted](https://archive.ph/o/2BLyQ/https:/news.usni.org/2022/03/28/fy-23-budget-navy-wants-to-shed-24-ships-for-3-6b-in-savings-over-next-five-years) its Fiscal Year 2023 budget request. It calls for decommissioning 24 active warships, ostensibly to save $3.6 billion over the next five years — in order to use the savings to start building a mere nine new ships. The first problem is that both the Navy’s top officer and two successive civilian administrations have repeatedly [said](https://archive.ph/o/2BLyQ/https:/news.usni.org/2022/02/18/cno-gilday-we-need-a-naval-force-of-over-500-ships) that the Navy must grow to 500 ships, up from 298 vessels today. Otherwise, the Navy will simply not be equipped to do the jobs demanded of it.

The logic of cutting the fleet size today in order to fund its future growth is not finding traction among knowledgeable observers on either side of the aisle. It simply doesn't make any sense. “HINT: If you want to grow the Navy, stop decommissioning more ships than you build,” tweeted Representative Elaine Luria, a Democrat from Virginia who serves as Vice Chair of the House Arms Services Committee.

Ms. Luria is a Naval Academy graduate who spent twenty years as a surface warfare officer. She didn’t hold back or couch her tweets in conventional political rhetoric, “I have delayed putting out a statement about the Defense Budget because frankly it would have been mostly full of words you might expect from a Sailor, but here goes: It sucks.”

Ms. Luria added: “The Navy will be losing 1000-plus vertical launch system missile cells, with no plan to replace them. Instead, the Navy is investing in the next ‘Gucci’ missile and technology that will not be mature for 20-plus years. The Navy has no strategy.”

Senator Inhofe, the ranking Republican on the Senate Armed Services Committee not only questioned the Navy’s logic but believes the real number may be only eight new builds because  the Pentagon may be [double-counting](https://archive.ph/o/2BLyQ/https:/breakingdefense.com/2022/03/navys-shipbuilding-request-may-be-violation-of-law-inhofe-warns/?mc_cid=de8752221a&mc_eid=4bc9404c92) an earlier approval.

The Navy’s portion of the proposed $773 billion Defense budget is $180.5 billion. That is only 4.8 percent higher than last year’s enacted funding and insufficient to keep up with the current inflation rate of 7.9 percent. Given this level of spending, the Navy will actually shrink to 280 ships by fiscal year 2027.

### 1NC---L---Infighting

#### Fix tag – reducing existing submarines for modern submarines like the plan ignite fights in congress

**Donnelly and Clevenger 22** [John M. Donnelly and Andrew Clevenger, John M. Donnelly is a senior writer for CQ Roll Call who specializes in defense. He has served as president of the Military Reporters & Editors Association, chairman of the National Press Club board of governors, and secretary of the Standing Committee of Correspondents in Congress. Andrew is a defense policy writer for Roll Call, 5-11-2022, accessed on 7-5-2022, Roll Call, "Tensions rise in House over Navy shipbuilding - Roll Call", https://rollcall.com/2022/05/11/tensions-rise-in-house-over-navy-shipbuilding/ mimou]

Sharp divisions over the adequacy of President Joe Biden’s fiscal 2023 request for the Navy’s shipbuilding budget emerged at two House hearings Wednesday.

The differences, which fell largely along party lines, were manifest at a House Appropriations Subcommittee on Defense budget hearing with the Pentagon top brass and a House Armed Services Committee hearing with the leaders of the Navy and Marine Corps.

At the Defense Appropriations hearing, the top Republican appropriator, [Kay Granger](https://www.rollcall.com/members/469?utm_source=memberLinks&utm_medium=memberlinks&personid=469) of Texas, and the ranking Republican member of the Defense panel, [Ken Calvert](https://www.rollcall.com/members/70?utm_source=memberLinks&utm_medium=memberlinks&personid=70) of California, complained the Navy would decommission significantly more ships in fiscal 2023 than it plans to procure, while China’s fleet is already larger — and growing more rapidly — than America’s.

But [Betty McCollum](https://www.rollcall.com/members/8151?utm_source=memberLinks&utm_medium=memberlinks&personid=8151), D-Minn., the Appropriations subcommittee’s chairwoman, sought to rebut these arguments by noting that nearly half of China’s larger Navy is made up of relatively small, support ships. She also noted that America’s allies in Asia have plenty of warships to bring to any fight.

A similar debate took place Wednesday at the House Armed Services Committee. Virginia Democrat [Elaine Luria](https://www.rollcall.com/members/118568?utm_source=memberLinks&utm_medium=memberlinks&personid=118568) joined several of her GOP colleagues in taking issue with the declining U.S. fleet size.

The $27.8 billion fiscal 2023 Navy budget would fund nine new warships, the administration has said. But 24 ships are being retired, for a net loss of 15.

The nine ships in the Freedom class of Littoral Combat Ships are a high-profile example of the decommissionings.

But Chief of Naval Operations Adm. Michael Gilday said at the committee hearing that the Navy is using the $3.6 billion saved from retirements over the next five years on new ships and more modern weapons — which he called “systems that matter."

The decision on which ships to retire was driven largely by whether the Navy could “count on them to actually move the needle in a high end fight with an adversary like China," Gilday said.

From Ukraine to China

The House Appropriations subcommittee hearing ran the gamut of subjects, from troops’ housing costs to cyberwarfare.

The conflict in Ukraine was a hot topic. Asked if the war could escalate into a conflict between Russia and NATO, Defense Secretary Lloyd J. Austin III said Russian President Vladimir Putin “doesn’t want to take on the NATO alliance.”

Army Gen. Mark Milley, the chairman of the Joint Chiefs of Staff, said Russia has fired hypersonic missiles in Ukraine, but the weapons have not created “significant or game-changing effects.”

McCollum, meanwhile, said at the end of the hearing that she supports another round of base closings to reduce excess infrastructure, which she said is 20 percent by one estimate.

But the shipbuilding issue was front and center for members of both parties at both House hearings Wednesday.

At the Appropriations hearing, Calvert predicted “glaring capability gaps” as a result of a shrinking fleet, noting also that hundreds of military aircraft would be retired under Biden’s fiscal 2023 plan. Calvert said China is building 22 ships this year to America's nine.

China has 355 ships in total and is projected to have 460 by 2030, according to a Pentagon report last fall.

The U.S. Navy, by comparison, would drop from 298 ships today to 280 by 2027 under the Biden plan.

Granger asked the department’s leaders why they would “mothball” the LCS ships under these circumstances, saying she has “serious concerns about the way that was determined.”

Milley replied that the issue "comes down to balance in terms of what's affordable and what the Navy can afford and what the Department of Defense can afford.”

Austin said the overall budget “maintains our edge but does not take that edge for granted.”

Numbers game

McCollum, meanwhile, said she is interested in exploring possible new uses for at least some of the Littoral Combat Ships that are facing early retirement.

But she pushed back at length against the GOP argument that America’s Navy is a shadow of China’s. And she made a rarely heard point: that trying to catch up in quantity is a vain effort.

“There’s a simple fact here: The United States does not have the shipbuilding industrial base to manufacture, let alone maintain, a Navy that can completely — numerically — compete with China,” McCollum said. “But quantity alone is not the point. It’s quality and capability that matter, as you gentlemen pointed out,” she said to Austin and Milley, who were joined by Defense Department Comptroller Mike McCord.

She then noted that China’s fleet — which she put at 500 ships — is comprised of 230 smaller support vessels. She also noted that three of America’s allies in the region — Japan, South Korea and Australia — have fleets totaling more than 350 ships combined, though she acknowledged some of those are smaller too.

“The debate I believe needs to be very substantiated, and not just picking a number that we think might be for the right number of ships for the U.S. to have,” she added.

She also alluded to the need to get ships in and out of maintenance faster, so that the actual number of deployed ships can grow.

‘Systems that matter’

Meanwhile, at the House Armed Services Committee, several Republicans joined Luria in voicing concern about the U.S. fleet size: [Mike D. Rogers](https://www.rollcall.com/members/15323?utm_source=memberLinks&utm_medium=memberlinks&personid=15323) of Alabama, the panel’s ranking member, plus [Rob Wittman](https://www.rollcall.com/members/27705?utm_source=memberLinks&utm_medium=memberlinks&personid=27705) of Virginia, [Mike Gallagher](https://www.rollcall.com/members/98216?utm_source=memberLinks&utm_medium=memberlinks&personid=98216) of Wisconsin and [Michael Waltz](https://www.rollcall.com/members/119499?utm_source=memberLinks&utm_medium=memberlinks&personid=119499) of Florida.

But Gilday, the Navy’s top admiral, replied that the radar on older cruisers being retired can’t see the threat, leaving them vulnerable. Similarly, the anti-submarine warfare system on the nine Littoral Combat Ships the Navy wants to decommission “did not work out technically,” he said.

“After about a year and a half [of] study, I refuse to put an additional dollar against a system that would not be able to track a high-end submarine in today’s environment,” Gilday said.

## China Espionage Turn

### Info sharing DA/Case Turn/DA to Open source CP

#### China steals the AFFs tech---fuels China’s military modernization

Xiu and Singer 21 — Ma Xiu is an analyst currently researching the PLA Rocket Force at BluePath Labs, LLC. P.W. Singer is Strategist at New America. Ma Xiu,Peter W. Singer, "How China Steals US Tech to Catch Up in Underwater Warfare," Defense One, 6-8-2021, https://www.defenseone.com/ideas/2021/06/how-china-steals-us-tech-catch-underwater-warfare/174558/, accessed 6-30-2022, WMK

In late April, Massachusetts-based businessman Qin Shuren became the latest person to plead guilty in the Justice Department’s crackdown on the illegal export of strategic technologies. Qin’s company, LinkOcean Technologies, falsified documentation to send a Chinese military-affiliated university some $100,000 worth of equipment, including hydrophones, sonobuoys, side-scan sonars, and even an autonomous underwater vehicle (AUV). The case is just one part of a long trail of open-source evidence that illustrates a larger issue: U.S. technology being used to advance Chinese military ends.

The trail begins with the Justice Department’s press release, which says that Mr. Qin was working at the direction of Northwestern Polytechnical University, in the northwest Chinese city of Xi’an. NWPU is one of the “Seven Sons of National Defense,” a group of universities known for particularly close ties to the People’s Liberation Army and which contribute a high proportion of China’s defense workforce and research. For two decades, NWPU has been on the U.S. Department of Commerce Entity List, the group of foreign organizations and individuals to which the export of certain U.S. strategic technologies is restricted.

While the available court documents do not go into further specifics, several of NWPU’s defense labs work on areas related to Qin’s case. The Key Lab for Underwater Information and Control conducts a wide range of strategic underwater research into sensing, acoustics, information processing, navigation, and communications for underwater vehicles, including submarines and AUVs. Along with its smaller sister, the National Lab of Acoustic Engineering and Testing Technology, it manages the Unmanned Navigation Technology Research Center in the eastern coastal city of Ningbo. This center researches propulsion, navigation, and acoustics for unmanned underwater vehicles, the kind of research that needs the hydrophones, sonobuoys, sonars, and AUVs that Qin pled guilty to illegally procuring.

The court documents describe Qin’s co-conspirator at NWPU as a professor and maritime information processing expert named Yang. Notably, the Key Lab is directed by Yang Yixin, who researches maritime information processing.

Digging deeper, we learn that the lab occasionally goes by a second, decidedly more military name: the Key Lab of Torpedo Guidance Technology. The Australian Strategic Policy Institute first raised the possibility that the two labs are one and the same, and our research concurs, given the near-complete overlap in missions, personnel, and associated organizations.

Moreover, this lab is actually jointly run by NWPU and the 705 Institute of the China State Shipbuilding Corporation. The CSSC is China’s largest shipbuilding conglomerate and builder of all of its warships; its 705 Institute is the country’s premier institution for torpedo research and development. The institute’s research underpins all of the torpedoes currently in service with the People’s Liberation Army Navy, including its most advanced, the Yu-6, allegedly based on the design of the American Mark 48 ADCAP. Unsurprisingly, it is also on the Entity List.

Despite being co-managed by two institutions that are under strict export control, the Key Lab makes extensive use of American and other foreign equipment in its research. We know this because the lab openly lists some of this gear on its website. It even helpfully labels each piece with its brand and country of origin.

From this list, we learn that U.S. export controls have not prevented the lab from acquiring high-end research equipment from various U.S. firms like Sun Microsystems, Agilent Technologies, Tektronix, and Applied Dynamics International. The equipment listed includes servers, precision instruments, advanced welding machines, specialized modems for acoustic communications, and, most notably of all, an entire AUV from the American company OceanServer. This particular model of AUV, the IVER-2-580-EP, is also used by the U.S. military for its own underwater research. According to court documents, Mr. Qin approached OceanServer about purchasing their AUV, but was allegedly turned down. Nevertheless, NWPU and the UIC lab claim to have somehow managed to get their hands on just such an AUV.

Why does all this matter, beyond connecting an admitted smuggler to a Chinese defense lab full of U.S.-made equipment? The PLA Navy is already larger than the U.S. Navy in terms of raw ship numbers, and the Americans’ qualitative edge is narrowing each year as China fields increasingly advanced and “smart” technologies, including torpedoes, mines, and UUVs. As highlighted by the case of Qin Shuren, at least some of these advances are being made with the help of U.S. technology. Sometimes the technology is purchased on the open market and other times it is gained through illicit means that range from cyber theft to old-fashioned espionage and smuggling.

Thus, the Qin Shuren case provides an instructive example of a much bigger and ongoing story: American technology being put to work advancing China’s military. It illuminates a threat that is leading the U.S. government to extend limits on trade with and investment in Chinese companies that “enable the development and modernization” of China’s military and “directly threaten” U.S. security. Indeed, the Biden administration just doubled the number of companies on the restricted list to 59 from the Trump-era 31.

## Strategic Stability DA

### 1NC --- Strategic Stability DA

#### Text: The United States federal government should:

#### cease use of artificial intelligence for military marine operations.

#### cooperate with the North Atlantic Treaty Organization to ban artificial intelligence in the marine military environment.

#### Applying AI to ASW destroys nuclear deterrence – squo tech is sufficient but the aff pushes it too far.

Johnson 20 – Dr. James Johnson is a postdoctoral research fellow at the James Martin Center for Nonproliferation Studies (CNS) at the Middlebury Institute of International Studies, Monterey. He holds a PhD in politics and international relations from the University of Leicester, where he is also an honorary visiting fellow with the School of History and International Relations. (James, "Artificial Intelligence: A Threat to Strategic Stability," STRATEGIC STUDIES QUARTERLY, Spring 2020, https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-14\_Issue-1/Johnson.pdf, Accessed 7-2-2022, LASA-SC)\*\*corrected spelling error

On the one hand, several experts argue that deployed in large swarms, these platforms could transform antisubmarine warfare, rendering at-sea nuclear deterrence vulnerable. On the other hand, some consider such a hypothesis technically premature because (1) it is unlikely that sensors on board AWSs would be able to reliably detect deeply submerged submarines; (2) the range of these sensors (and the drones themselves) would be limited by battery power over extended ranges;52 and (3) given the vast areas traversed by SSBNs on deterrence missions, the chance of detection is negligible even if large numbers of autonomous swarms were deployed.53 Thus, significant advances in power, sensor technology, and communications would be needed before these autonomous systems have a gamechanging strategic impact on deterrence.54 However, irrespective of the veracity of this emerging capability, the mere perception that nuclear capabilities face new strategic challenges would nonetheless elicit distrust between nuclear-armed adversaries—particularly where strategic force asymmetries exist. Moreover, DARPA’s Sea Hunter demonstrates how the emerging generation of autonomous weapons is expediting the completion of the iterative targeting cycle to support joint operations, thus increasing the uncertainty about the reliability and survivability of states’ nuclear second-strike capability and potentially triggering use-them[-or]-lose-them situations. Conceptually speaking, the most destabilizing impact of AI on nuclear deterrence would be the synthesis of autonomy with a range of machinelearning-augmented sensors, undermining states’ confidence in the survival of their second-strike capabilities and in extremis triggering a retaliatory first strike.55 Enhanced by the exponential growth in computing performance and coupled with advances in machine learning techniques that can rapidly process data in real time, AI will empower drone swarms to perform increasingly complex missions, such as hunting hitherto hidden nuclear deterrence forces.56 In short, the ability of future iterations of AI able to predict based on the fusion of expanded and dispersed data sets and then to locate, track, and target strategic missiles such as mobile ICBM launchers in underground silos, on board stealth aircraft, and in SSBNs is set to grow.57

#### That destroys strategic stability – ensures inadvertent escalation.

Johnson 20 – Dr. James Johnson is a postdoctoral research fellow at the James Martin Center for Nonproliferation Studies (CNS) at the Middlebury Institute of International Studies, Monterey. He holds a PhD in politics and international relations from the University of Leicester, where he is also an honorary visiting fellow with the School of History and International Relations. (James, "Artificial Intelligence: A Threat to Strategic Stability," STRATEGIC STUDIES QUARTERLY, Spring 2020, https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-14\_Issue-1/Johnson.pdf, Accessed 7-2-2022, LASA-SC)

Finally, in the maritime domain, unmanned underwater vessels (UUV), unmanned surface vessels (USV), and UAVs supported by AI-enabled intra-swarm communication and ISR systems could be deployed simultaneously in both offensive and defensive antisubmarine warfare operations to saturate an enemy’s defenses and to locate, disable, and destroy its nuclear-armed or nonnuclear attack submarines.64 Despite continued advances in sensor technology design (e.g., reduced size and extended detection ranges) to overcome quieting challenges, other technical challenges still remain. These include communicating underwater between multiple systems, processing power requirements, generating battery life and energy, and scaling the system.65 While some experts do not expect a technically reliable and effective capability of this kind will be operational for at least a decade, others are more optimistic.66 From a tactical perspective, drone swarms would not need ocean-wide coverage (or full ocean transparency) to effectively detect and track submarines. According to UK rear admiral John Gower, a relatively even spread of sensors might be sufficient to enable “a viable search and detection plan . . . conceived for the open ocean” (emphasis added).67 Moreover, advances in mobile sensing platforms could enable drones in swarms to locate submarines through chokepoints (or gateways) as they emerge from ports. Due to the current slowness of drones with extended sea ranges, however, trailing them autonomously seems implausible.68 Future iterations of machine-learning-augmented UUVs and USVs may eventually complement, and perhaps replace entirely, the traditional role of general-purpose nuclear-powered submarines (SSN) and manned surface vehicles in tracking and trailing submarines of adversaries at chokepoints while simultaneously mounting sparsely distributed and mobile distributed network systems (DNS) sensors on UUVs.69 If a state views the credibility of its survivable nuclear weapons (especially nuclear-armed submarines) to be at risk,70 conventional capabilities such as drone swarms will likely have a destabilizing effect at a strategic level.71 Thus, even if swarm sorties were not intended as (or indeed technically capable of ) a disarming first strike, the perception alone of the feasibility of such an operation would be destabilizing nonetheless.Moreover, the speed of AI could put the defender at a distinct disadvantage, creating additional incentives to strike first (or preemptively) technologically superior military rivals. Consequently, the less secure a nation considers its second-strike capabilities to be, the more likely it is to countenance the use of autonomous systems within its nuclear weapons complex to bolster the survivability of its strategic forces. According to analyst Paul Scharre, “winning in swarm combat may depend upon having the best algorithms to enable better coordination and faster reaction times, rather than simply the best platforms” (emphasis added).72 Combining speed, persistence, scope, coordination, and battlefield mass, AWSs will offer states attractive asymmetric options to project military power within contested A2/AD zones.73 Enhanced by sophisticated machine learning neural networks, China’s manned and unmanned drone teaming operations could potentially impede future US freedom of navigation operations in the South China Seas.74 Its air- and sea-based drones linked to sophisticated neural networks could, for example, support the People’s Liberation Army’s manned and unmanned teaming operations. Were China to infuse its cruise missiles and hypersonic glide capabilities with AI and autonomy, close-range encounters in the Taiwan Straits and the East and South China Seas would become more complicated, accident-prone, and destabilizing—at both a conventional and nuclear level.75 China is reportedly developing and deploying UUVs to bolster its underwater monitoring and antisubmarine capabilities as part of a broader goal to establish an “underwater Great Wall” to challenge US undersea military primacy. US AI-enhanced UUVs could, for example, theoretically threaten China’s nuclear ballistic and nonnuclear attack submarines.76

#### US-China war causes extinction.

Brands 22 – Hal Brands is a Bloomberg Opinion columnist. The Henry Kissinger Distinguished Professor at Johns Hopkins University’s School of Advanced International Studies, he is co-author, most recently, of "Danger Zone: The Coming Conflict with China" and a member of the State Department's Foreign Affairs Policy Board. (Hal Brands, "U.S. Isn’t Ready for Nuclear Rivalry With China and Russia," Bloomberg, 1-30-2022, https://www.bloomberg.com/opinion/articles/2022-01-30/u-s-isn-t-prepared-for-a-nuclear-war-with-russia-and-china, Accessed 7-2-2022, LASA-SC)

Then there is Beijing’s buildup. China may once have possessed a “minimal deterrent” — a small, relatively vulnerable arsenal, designed solely to deter nuclear attack on China itself — but that’s no longer the case. The Chinese test of a fractional orbital bombardment system (in essence, a nuclear-weapon delivery system that orbits the earth before plunging toward its target) is only part of a much larger endeavor.

China is now building a more secure and sophisticated “nuclear triad” — a combination of nuclear-capable bombers, ground-based intercontinental missiles and submarine-launched ballistic missiles. Its ICBM force is expanding rapidly. The Pentagon predicts that China will have more than 1,000 deliverable warheads by 2030 — an arsenal worthy of a superpower.

The return of great-power competition has brought with it the return of nuclear rivalry. Meanwhile, conventional weakness is making nuclear weapons even more important to U.S. strategy.

Over the past two decades, Russian and Chinese conventional buildups have dramatically altered the balance of power in Eastern Europe and the Western Pacific. Washington and its allies might struggle to defeat a determined Russian attack on Estonia or a Chinese assault against Taiwan. An old question is becoming newly relevant: Would the U.S. start a nuclear war to avoid losing a conventional one?

The likelihood of a great-power war going nuclear is significantly higher than most Americans probably realize. If China attacked Taiwan, it would probably use its conventional missiles to maul America’s air and naval assets in the Pacific. Within days, the U.S. might face a choice between seeing Taiwan defeated or using low-yield nuclear weapons against Chinese ports, airfields or invasion fleets.

Alternatively, if a U.S.-China war turned into a bloody stalemate, American leaders might be tempted to use nuclear threats or strikes to batter the Chinese into conceding defeat. Does this sound crazy? Washington repeatedly considered nuclear strikes against China the last time the two countries fought a stalemated war, in Korea.

China might also have incentives to go nuclear. Starting, and then losing, a war against the U.S. could be a fatal mistake for President Xi Jinping. If an invasion of Taiwan faltered, Beijing could try to turn the tide, or simply convince America to quit, by firing nuclear-tipped missiles at or near Guam or another important U.S. military facility in the region. Such coercive uses of nuclear weapons may be what China has in mind in enlarging its arsenal today.

### 2NC --- Impact O/V

#### DA turns case – makes miscalc more likely

Johnson 20 – Dr. James Johnson is a postdoctoral research fellow at the James Martin Center for Nonproliferation Studies (CNS) at the Middlebury Institute of International Studies, Monterey. He holds a PhD in politics and international relations from the University of Leicester, where he is also an honorary visiting fellow with the School of History and International Relations. (James, "Artificial Intelligence: A Threat to Strategic Stability," STRATEGIC STUDIES QUARTERLY, Spring 2020, https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-14\_Issue-1/Johnson.pdf, Accessed 7-2-2022, LASA-SC)

AI-augmented conventional capabilities might affect strategic stability between great military powers. The nuanced, multifaceted possible intersections of this emerging technology with a range of advanced conventional weapons can compromise nuclear capabilities, thus amplifying the potentially destabilizing effects of these weapons. This article argues that a new generation of artificial intelligence–enhanced conventional capabilities will exacerbate the risk of inadvertent escalation caused by the commingling of nuclear and nonnuclear weapons. The increasing speed of warfare will also undermine strategic stability and increase the risk of nuclear confrontation.

#### First strike postures cause rapid escalation and great power conflicts

**Mendenhall 19** [Elizabeth Mendenhall, Dr. Elizabeth Mendenhall has a Ph.D. in International Relations from Johns Hopkins University and is now an assistant professor at the University of Rhode Island's Department of Marine Affairs. She teaches International Ocean Governance in Marine Affairs, and has a (limited) joint appointment with Political Science. Her research centers on the ocean governance regime, especially the Law of the Sea Convention. January 2019, accessed on 7-2-2022, Journal of Military Strategies, "Fluid Foundations: Ocean Transparency, Submarine Opacity, and Strategic Nuclear Stability", mimou]

Force structure changes occur slowly, and countries reacting to transparency may pursue interim strategies for achieving nuclear deterrence. One means of making a retaliatory strike secure is to launch the weapons before the first strike hits. In the early Cold War, American strategists proposed adopting a “launch on warning” posture until a survivable force – such as mobile ICBMs – could be built and deployed.155 The adoption of such a posture would in itself be a negative development for strategic nuclear stability; “launch on warning” is understood to significantly increase the risk of accidental war.156 If countries like the United States and Russia adopt this posture, China, India, and Pakistan are likely to do the same.157 A “launch on warning” posture would be even more dangerous in South Asia.158 The possibility of an effective first strike by the United States could destabilize great power politics by encouraging such risky strategic postures, and even military pre-emption.159 The best way to “de-alert” from a dangerous “launch on warning” posture is to assign the function of retaliation to a completely survivable force.160

### 2NC --- Link Overview

#### Sudden boost in transparency tech destabilizes nuclear weapons – increases launch on warning and instability

**Mendenhall 19** [Elizabeth Mendenhall, Dr. Elizabeth Mendenhall has a Ph.D. in International Relations from Johns Hopkins University and is now an assistant professor at the University of Rhode Island's Department of Marine Affairs. She teaches International Ocean Governance in Marine Affairs, and has a (limited) joint appointment with Political Science. Her research centers on the ocean governance regime, especially the Law of the Sea Convention. January 2019, accessed on 7-2-2022, Journal of Military Strategies, "Fluid Foundations: Ocean Transparency, Submarine Opacity, and Strategic Nuclear Stability", mimou]

Transparency does not have to be synoptic to make submarines vulnerable. The small number of SSBNs each national military has on patrol, and the even smaller number of submarine bases, means that sensing technologies can achieve functional transparency before they achieve global-scale transparency. 161 AUV platforms in particular could pick up a submarine as it exits its base or transits maritime chokepoints, and then track its course automatically.162 This situation, where a state locates all of its rival’s SSBNs today, but may not be able to keep track of them tomorrow, is particularly destabilizing. A closing window of first strike opportunity increases crisis instability, which is why forces that are always invulnerable are best for stability.163 There are many other possible ways that military actors may respond to increasing ocean transparency. The isolated, open-ocean patrols that formerly hid SSBNs safely under the surface may become a thing of the past. The bastion strategy could be adopted by all major nuclear powers, such that SSBNs are kept in noisy, covered, or well-defended areas. Large swarms of AUVs may travel in convoys around SSBNs to disrupt localization by acoustic or non-acoustic measures. Fear of transparency could lead vulnerable nuclear powers to target communications nodes that enable networked sensing, or develop techniques to trawl AUVs out of certain areas. Attempts to sustain survivability could be relatively simple – such as investing in mobile ICBMs or adopting “launch on warning” postures – or complex, involving ASW measures and counter-measures without one having a clear advantage. Any of these scenarios represent a significant risk of instability. Conclusion If ocean transparency made nuclear strategic submarines more detectable, locatable, and targetable, the military and political implications would be significant. Yet the topic of SSBN vulnerability is “virtually taboo” in the US Navy’s public documents. 164 A culture of complacency has set in regarding the role and missions of SSBNs, such that submariners are poorly equipped to adjust to potentially novel operational realities. 165 Other countries are walking the same path: the planned development of SSBNs by India and Pakistan is driven by a judgment about their superior and durable survivability. 166 This paper challenges the assumption that extrapolations from the past can serve as reliable guides for the future. Specifically, the security of second-strike capabilities, and therefore the assurance of mutual destruction, rests on fluid material foundations. Whether the potential obsolescence of “hiding” technologies occurs as a slow erosion of usefulness, or an avalanche of illumination, could have serious implications for nuclear strategic stability. The possibility of, and reactions to, ocean transparency present a challenge for the prevailing arms control regime. The force structures created and shaped by existing arms control treaties assume the superior survivability of SSBNs as the foundation of nuclear deterrence. If transparency were to arrive as a “technological surprise,” this feature of the regime sets the stage for instability.167 The responses to transparency described in the final section each have negative implications for the existing arms control regime. Without invulnerability, nuclear states may pursue a “safety in numbers” approach to achieving a secure second strike, which would require a substantial buildup in weaponry. The pursuit of “launch on warning” postures conflicts with the arms control agenda of “lengthening the fuse.”168 If “mutually assured destruction” were abandoned wholesale, the possible return to a “war strategism” approach that sees nuclear weapons as usable would be especially detrimental to the arms control agenda. An arms control regime that accounts for the possible erosion of transparency might replicate the Treaty on Open Skies, which regulates the frequency and resolution of aircraft surveillance.169 This strategy would entail rebuilding opacity by treaty where it may be undermined by technology.

#### Just the *PERCEPTION* of the plan undermining strategic stability and triggers use them or lose them fears

**Johnson 20** [James Johnson, James has a PhD in Politics and International Relations from the University of Leicester. He is the author of The US-China Military & Defense Relationship During the Obama Presidency. He is also a Postdoctoral Fellow at the James Martin Center for Nonproliferation. 4-16-2020, Taylor & Francis, "Artificial Intelligence, Drone Swarming and Escalation Risks in Future Warfare", <https://www.tandfonline.com/doi/abs/10.1080/03071847.2020.1752026?scroll=top&needAccess=true&journalCode=rusi20> mimou]

Significant advances in power, sensor technology and communications would be needed before these autonomous systems have a game-changing strategic impact on submarine reconnaissance.[43](https://www-tandfonline-com.proxy.lib.umich.edu/doi/full/10.1080/03071847.2020.1752026#EN0043) However, irrespective of the veracity of this emerging capability, the mere perception that nuclear capabilities face new strategic challenges would nonetheless elicit distrust between nuclear-armed adversaries, in particular where strategic force asymmetries exist. Autonomous capabilities – like the Defence Advanced Research Project Agency’s (DARPA) Sea Hunter – demonstrate how autonomous weapons could accelerate the completion of the iterative targeting cycle to support joint operations – thereby reducing the reliability and survivability of states’ nuclear second-strike capability, and potentially causing use-them-or-lose-them situations. In the near term, therefore, the most significant destabilising impact of AI on nuclear deterrence will likely be the synthesis of autonomy with a range of machine-learning-augmented sensors, potentially undermining states’ confidence in the survival of their second-strike capabilities, which could trigger a retaliatory first strike.[44](https://www-tandfonline-com.proxy.lib.umich.edu/doi/full/10.1080/03071847.2020.1752026#EN0044) Enhanced exponential growth in computing performance,[45](https://www-tandfonline-com.proxy.lib.umich.edu/doi/full/10.1080/03071847.2020.1752026#EN0045) together with advances in the machine-learning techniques that can rapidly process data in real time, will empower drone swarms to perform increasingly complex missions, such as hunting hitherto hidden nuclear deterrence forces. In short, the ability of future iterations of AI that are able to make predictions based on the fusion of expanded and dispersed datasets, and then locate, track and target strategic missiles in underground silos (especially mobile intercontinental ballistic missile launchers), onboard stealth aircraft, SSBNs and truck- or rail-mounted transporter erector launchers (TELs), is set to grow.[46](https://www-tandfonline-com.proxy.lib.umich.edu/doi/full/10.1080/03071847.2020.1752026#EN0046)

### 2NC --- Perception Links

#### USV’s lower the threshold for warfare and increase vulnerabilities for escalation.

**O'Rourke 21** [Ronald O'Rourke, Specialist in Naval Affairs 02-25-2021, Worldcat, "Navy large unmanned surface and undersea vehicles: background and issues for Congress Internet resource, 2019 [WorldCat.org]", <https://www.worldcat.org/title/navy-large-unmanned-surface-and-undersea-vehicles-background-and-issues-for-congress/oclc/1149091254> mimou]

Another oversight issue for Congress concerns the potential implications of large UVs, particularly large USVs, for the chance of miscalculation or escalation in when U.S. Navy forces are operating in waters near potential adversaries. Some observers have expressed concern about this issue. A June 28, 2019, opinion column, for example, states The immediate danger from militarized artificial intelligence isn't hordes of killer robots, nor the exponential pace of a new arms race. As recent events in the Strait of Hormuz indicate, the bigger risk is the fact that autonomous military craft make for temping targets and increase the potential for miscalculation on and above the high seas. While less provocative than planes, vehicles, or ships with human crew or troops aboard, unmanned systems are also perceived as relatively expendable. Danger arises when they lower the threshold for military action. It is a development with serious implications in volatile regions far beyond the Gulf not least the South China Sea, where the U.S. has recently confronted both China and Russia. As autonomous systems proliferate in the air and on the ocean, [opposing] military commanders may feel emboldened to strike these platforms, expecting lower repercussions by avoiding the loss of human life. Consider when Chinese naval personnel in a small boat seized an unmanned American underwater survey glider[54](https://www.everycrsreport.com/files/20191115_R45757_dcd449ff9e30ad83725260428a1f05fd73803216.html" \l "fn54) in the sea approximately 100 kilometers off the Philippines in December 2016. The winged, torpedo-shaped unit was within sight of its handlers aboard the U.S. Navy oceanographic vessel Bowditch, who gaped in astonishment as it was summarily hoisted aboard a Chinese warship less than a kilometer distant. The U.S. responded with a diplomatic demarche and congressional opprobrium, and the glider was returned within the week. In coming years, the Chinese military will find increasingly plentiful opportunities to intercept American autonomous systems. The 40-meter prototype trimaran Sea Hunter, an experimental submarine-tracking vessel, recently transited between Hawaii and San Diego without human intervention. It has yet to be used operationally, but it is only a matter of time before such vessels are deployed. China's navy may find intercepting such unmanned and unchaperoned surface vessels or mini-submarines too tantalizing to pass up, especially if Washington's meek retort to the 2016 glider incident is seen as an indication of American permissiveness or timidity. With a captive vessel, persevering Chinese technicians could attempt to bypass anti-tamper mechanisms, and if successful, proceed to siphon off communication codes or proprietary artificial intelligence software, download navigational data or pre-programmed rules of engagement, or probe for cyber vulnerabilities that could be exploited against similar vehicles. Nearly 100,000 ships transit the strategically vital Singapore Strait annually, where more than 75 collisions or groundings occurred last year alone. In such congested international sea lanes, declaring a foreign navy's autonomous vessel wayward or unresponsive would easily serve as convenient rationale for towing it into territorial waters for impoundment, or for boarding it straight away. A memorandum of understanding signed five years ago by the U.S. Department of Defense and the Chinese defense ministry, as well as the collaborative code of naval conduct created at the 2014 Western Pacific Naval Symposium, should be updated with an expanded right-of-way hierarchy and non-interference standards to clarify how manned ships and aircraft should interact with their autonomous counterparts. Without such guidance, the risk of miscalculation increases. An incident without any immediate human presence or losses could nonetheless trigger unexpected escalation and spark the next conflict.[55](https://www.everycrsreport.com/files/20191115_R45757_dcd449ff9e30ad83725260428a1f05fd73803216.html" \l "fn55)

#### AI submarines undermine the cornerstone of nuclear deterrence

**Mishra 19** [Sylvia Mishra, Sylvia Mishra is a researcher at the Institute for International Science and Technology Policy at George Washington University. Image courtesy of the US Department of Defense. 5-8-2019, The Strategist, "Could unmanned underwater vehicles undermine nuclear deterrence?", <https://www.aspistrategist.org.au/could-unmanned-underwater-vehicles-undermine-nuclear-deterrence/> mimou]

Nuclear deterrence rests on the ability of strategic assets to survive an enemy’s first strike and to retaliate, ensuring mutually assured destruction. Nuclear-powered ballistic-missile submarines (SSBNs) are considered to be the most survivable of all nuclear platforms due to their stealth capabilities, mobility and discretion. Placing nuclear assets underwater puts them at a safer distance from a crippling first strike. But as technology improves and the ocean battlefield becomes more complex, these advances could undermine the survivability of strategic forces around the world and make them far more vulnerable. Emerging technologies like unmanned underwater vehicles (UUVs) add to the complexity of the battle space and disrupt the status quo. Swarms of autonomous underwater drones could be deployed to hunt ballistic-missile submarines, targeting a cornerstone of nuclear deterrence. In their 2017 [article](https://www.belfercenter.org/publication/new-era-counterforce-technological-change-and-future-nuclear-deterrence) ‘The new era of counterforce’, Keir A. Lieber and Daryl Press argue that for most of the nuclear age, the survivability of retaliatory forces seemed straightforward. However, improvements in counterforce technology have eroded this cornerstone of nuclear deterrence. As new technology continues to raise the potential for major shifts in the military realm, the rapid advent of these drones may reduce the credibility and effectiveness of SSBNs. UUVs can function without the direction of a human operator and have wide [dual-use (that is, civilian and military) applications](https://www.simulyze.com/blog/from-land-to-sea-5-ways-drones-are-impacting-underwater-operations). Some are used for commercial purposes, hydrography and oceanographic research. Lockheed Martin’s yellow Marlin drone submarine [inspects](https://www.reuters.com/article/us-lockheed-marlin/weapons-maker-lockheed-builds-submarine-for-oil-rigs-idUSBRE87300D20120804) offshore rigs and underwater pipelines, a task that’s worth around a billion dollars a year in the Gulf of Mexico. But UUV technologies have been evolving from defensive to more offensive roles. UUVs increasingly play a [critical role in antisubmarine warfare](https://www.csmonitor.com/USA/Military/2014/0716/Military-ramps-up-use-of-underwater-drones.-What-do-they-do) (ASW) and perform missions such as placing and monitoring sensors on the sea floor to track enemy submarines. They can gather intelligence on opponents, detect and neutralise mines, hunt submarines and chart the ocean floor. They could, potentially, detonate warheads. And they could take part in a coordinated attack on an enemy submarine in conjunction with ‘friendly’ submarines and surface vessels. The United States, Russia and China are investing in this technology to bolster their ASW capability and it’s evident that UUVs will be deployed in the near future in combat operations. The US Navy released a [UUV masterplan](https://www.navy.mil/navydata/technology/uuvmp.pdf) in 2004 that set out nine priority areas for future UUV capabilities. In 2015, Brigadier General Frank Kelly became the [first deputy assistant secretary of the US Navy for unmanned systems](https://news.usni.org/2015/10/27/retired-brig-gen-frank-kelley-named-first-ever-deputy-assistant-secretary-of-the-navy-for-unmanned-systems). In 2016, the Department of Defense [reportedly spent](http://www.kemplon.com/how-submarine-drones-are-changing-the-naval-modus-operandi/) US$232.9 million on procuring UUVs (US$86.7 million more than in 2015). In 2018, the US Office of Naval Research [awarded Raytheon](https://navaltoday.com/2018/06/28/raytheon-wins-contract-for-locus-inp/) a US$29.7 million contract for developing a naval prototype of a ‘low-cost UAV swarming technology’, or LOCUST, system that can overwhelm an adversary.

#### Improved sensing fails – countermeasures increase risk of escalation.

**Horowitz et al 19** [Michael C. Horowitz, Paul Scharre, and Alexander Velez-Green, Michael C. Horowitz is Richard Perry Professor and the Director of Perry World House at the University of Pennsylvania. He is also an adjunct senior fellow at the Center for a New American Security. , Senior Fellow and Director of the Technology and National Security Program at the Center for a New American Security, Alexander Velez-Green is a Joseph S. Nye, Jr. Research Intern in the 20YY Warfare Initiative at the Center for a New American Security. His research focuses on the impact of autonomous weapon systems on international strategic stability. Mr. Velez-Green graduated from Harvard College where he focused on Middle Eastern politics and the challenges of modern warfare. , 12-11-2019, accessed on 7-2-2022, Cornell University, "A Stable Nuclear Future? The Impact of Autonomous Systems and Artificial Intelligence", <https://arxiv.org/abs/1912.05291#:~:text=The%20Impact%20of%20Autonomous%20Systems%20and%20Artificial%20Intelligence,-Michael%20C.&text=The%20potential%20for%20advances%20in,critical%20question%20for%20international%20politics>. Mimou]

* link about increasing uuvs

Claims that AI could generate a “transparent ocean”112 or “selective ocean transparency”113 likely overstate the ability of low-cost UUVs, USVs, and UAVs to conduct these steps. First, in order to be low-cost, uninhabited vehicles are generally of limited size, weight, and power (SWaP) capacity, at least relative to traditional attack submarines. These facts, combined with the inherent physics-based difficulties of sensing in the undersea environment,114 mean that the sensors carried by any given low-cost UUV, USV, or UAV will be of limited detection range regardless of the phenomenologies they employ.115 Given the sensors’ limited range, ASW forces would need to deploy large numbers of sensor vehicles to seamlessly cover even small oceanic areas.116 UUVs in particular are limited in endurance, because of their need to rely on air-independent power sources such as batteries or fuel cells. This means that additional UUVs would be needed to sustain a track on a submarine over time, as UUVs reach the end of the their operational endurance and need to return to base. (Ultra-long endurance UUV power solutions, such as thermal gliders that draw energy from ocean thermoclines, lack sufficient speed and power to maintain track on a submarine.117) While fleets of UUVs, USVs, and UAVs are likely to have cost-savings relative to traditional assets and will be valuable supplements in a “high-low mix” of ASW capabilities, the scale of assets needed to render even a portion of the ocean “transparent” would likely be enormous. Setting cost and practicality aside, ASW forces would also have to keep these sensors appropriately positioned to maintain high-confidence area surveillance and target tracking. This would require a level of multi-system control reliability and resilience not yet demonstrated.118 Fewer sensors would be required to monitor ocean chokepoints. But only Chinese and British SSBNs must pass through chokepoints to hold their primary targets at risk – and both countries have offset this risk. Although Chinese SSBNs would need to pass through chokepoints in the First Island Chain to cover the entire United States, China’s land-based mobile ICBM force can cover targets at that range. Likewise, British SSBNs must pass through chokepoints to the north or south of Ireland to reach deep waters. But, as British Rear Admiral John Gower has written, monitoring those chokepoints would probably still require a high number of sensors.119 And the costs of maintaining or cycling those systems would still be high. Furthermore – and crucially – any UUVs, USVs, or UAVs deployed in the chokepoints would be subject to countermeasures employed on an adaptive basis, including improved stealth, jamming, multi-phenomenology decoys and spoofing, evasive maneuvers, or outright destruction by SSBN protection forces.120 Many of the same countermeasures could also be used against sensors operating in the open ocean. Even if ASW forces were able to maintain optimal sensor coverage in the search area, they would then face problems of data transmission that automation is ill suited to solve. The UUVs, USVs, and UAVs sent to monitor the open ocean or a chokepoint must be able to share data – processed or raw – amongst themselves – directly or through command nodes – in a timely manner in order to maintain coverage, cue and direct searches, confidently classify a contact as an SSBN, and then support weapons employment against the SSBN. In order to be used effectively, any vehicle that attains a track on an SSBN would need to be able to transmit that data to another vehicle.121 While highly automated network management technologies may be able to enhance communications resilience between uninhabited – or uninhabited and inhabited – ASW platforms,122 such data transmission will remain a vulnerability for any undersea communications.123 It bears noting that the physics of undersea communications results in fairly short range communications paths at low data rates. Longer range communications paths and higher data rates forces reliance on surface or airborne communications relays that are vulnerable to jamming or other interference. Even temporary or partial delays in data transmission could undermine ASW forces’ abilities to localize an SSBN – and given that the window of opportunity to localize a submarine may be very short, an inopportune communications delay or disruption may make the difference between ASW success and failure.124 Finally, if we assume that ASW forces relying on UUVs, USVs, and UAVs were able to confidently classify and localize an SSBN in their search area, they would need to maintain localization long enough for an ASW weapons-carrying platform to close within attack range of the SSBN and successfully engage it. If a weapons-carrying platform is located close by, for instance, near a chokepoint through which a SSBN is transiting and where that SSBN’s protection forces are unable provide effective coverage – again, an implausible scenario for reasons of both geography and nuclear force structure for all nuclear-armed states – this may be a relatively easy problem to solve. However, if the search is occurring in the open ocean, the sheer expanse of that area suggests that a weapons-carrying platform is unlikely to be within immediately-actionable proximity of the SSBN when confident classification is made.125 Automated protocols might reduce the time required to signal and dispatch an ASW weaponscarrying platform. But the weapons-carrying platform’s transit time alone would leave a window for the SSBN’s crew to conduct countermeasures—or for inherently dynamic underwater conditions to degrade the ability of the sensors in contact to maintain track. This time window could be reduced by arming uninhabited vehicles directly. Nevertheless, the problems of coordinating multiple vehicles, at scale, for an extended period of time, and robustly in a challenging communications environment amidst adversary countermeasures remains. If ASW forces miss any of these steps, then they will be unable to detect, classify, localize, and engage the SSBN. To successfully prosecute a disarming first strike against a nation’s entire SSBN fleet, an opposing nation’s ASW forces would need to execute the entire kill chain for every one of those boats – and probably near-simultaneously to avoid triggering fleet-wide countermeasures (which would render subsequent ASW operations even more difficult) or strategic escalation.126

### 2NC --- Links --- Russia Miscalc

#### U.S sub detection capabilities cause Russian prolif, and destabilizing escalation scenarios

**Kattan 21** [Ari Kattan, Ari Kattan is a policy analyst at Science Applications International Corporation (SAIC), where he supports the DefenseScience Board. The views expressed here are those of the author and do not necessarily represent the views of SAIC or itsgovernment clients., 08-15-2021, accessed on 7-2-2022, Center for Strategic and International Studies, "Emerging Submarine Detection Technologies and Implications for Strategic Stability", <https://www.jstor.org/stable/resrep22545.9?seq=1> mimou]

The U.S.-Russia relationship is defined by Russian fear of its own weaknesses (economic, technological, etc.) and paranoia about U.S. and NATO threats to its security. Russia currently fears U.S. conventional superiority20 and has invested in capabilities and tactics to circumvent it.21 It is embarking on a modernization program for its nuclear weapons in part because it feels insecure about the survivability of its nuclear forces as the United States increases its progress on ballistic missile defense. If the United States were able to track Russian nuclear-armed submarines with increased confidence, it could exacerbate these Russian fears even more, causing Russia to respond in destabilizing ways. While it is true that Russia has never relied as much on submarine-based weapons as the United States has, the degradation of the survivability of Russia’s nuclear-armed submarines would likely cause Russia to compensate for this new vulnerability. This is especially true if continued advancements in precision strike make Russia’s air- and land-based nuclear forces more vulnerable. If Russia can no longer rely on hardening and concealment for survivability, they may double down on redundancy, producing and deploying larger numbers of nuclear weapons to complicate U.S. targeting and increase the odds that a retaliatory capability survives any U.S. first strike. This, in turn, could put the final nail in the coffin of arms control and lead to an arms race with the United States that drains resources, intensifies mistrust, and makes miscalculation more likely. In short, a significant U.S. advantage in submarine detection (which would likely develop in parallel with a U.S. advantage in remote sensing and precision strike capabilities in other domains) would likely be destabilizing due to Russian sensitivity over its technological inferiority. This could compel Russia not only to increase redundancy with a larger number of warheads, but to change the doctrine governing their use as well. It is possible that in an environment of degraded second-strike stability, Russia could move further towards a first-use doctrine to deter escalation and to avoid the “lose them or lose them” dilemma. China would likely be less sensitive to advancements in U.S. submarine detection capabilities for two reasons. First, China’s strategic relationship with the United States, at least currently, is not defined by an assumed need for parity but by a need for a minimum reprisal capability, which it believes it has and will continue to have in the future.22 It currently has a much smaller nuclear arsenal than the United States and relies on hardened and road-mobile land-based ICBMs for its retaliatory capability, which it believes is sufficient as long as it can hit the United States with just a few nuclear warheads, or even a single nuclear warhead.23 Second, China has not historically relied on SSBNs for its second-strike capability, and even as it begins deploying a credible sea-based nuclear deterrent for the first time,24 it recognizes that its submarines are less advanced and thus more vulnerable to ASW than U.S. submarines. Therefore, China will likely continue to rely on land-based nuclear forces.25 The remote sensing and precision strike revolution will certainly have implications for U.S.-China relations, but in the narrow hypothetical of U.S. superiority in submarine detection, China would be less concerned than Russia. They may, however, be sufficiently concerned that they decide to expand the size of their arsenal as a hedge. Overall, conditions under which the United States had a significant advantage in submarine detection could push some adversaries away from an assured retaliation nuclear posture and towards what Vipin Narang calls an asymmetric escalation nuclear posture.26 An asymmetric escalation nuclear posture entails threatening to use nuclear weapons first in a conflict to deter conflict and to prevent successful counterforce targeting by an adversary. If nations currently predisposed towards adopting assured retaliation postures no longer feel that the second-strike forces necessary for such a posture are secure, they may be forced to adopt asymmetric escalation postures.

### 2NC --- Links --- Transparency

#### Transparent ocean risks undermining second-strike capabilities

Kallenborn ‘19

(Zachary, freelance researcher and analyst, specializing in chemical, biological, radiological, and nuclear (CBRN) weapons, CBRN terrorism, drone swarms, and emerging technologies, October 2019 Proceedings Vol. 145/10/1,400, “pg online @ <https://www.usni.org/magazines/proceedings/2019/october/if-oceans-become-transparent> // um-ef)

The Most Survivable Leg of the Triad? A more transparent ocean would pose a significant risk to the nation’s second-strike nuclear capability, at least as currently conceptualized. The second-strike capability maintains a credible threat to retaliate with nuclear force in the event of an adversary’s large-scale nuclear bombardment. The U.S. nuclear submarine force is usually considered the key component of U.S. second-strike capability, because of the ocean’s vastness and the limited ability of sensors to track all subs all the time. If sensor technology coupled with other military capabilities overcomes this challenge, submarines will lose much of their stealth. An adversary could launch a successful strike without fear of retaliation, because each nuclear submarine could be targeted and destroyed. Even without complete transparency, a window may open in which an adversary has enough awareness to risk a first strike. Thankfully, these risks are unlikely because the hider-finder model of submarine warfare is incomplete.

### 2NC --- Links --- UUVs

#### UUVs cause china to fear loss of 2nd strike capabilities --- causes shift to LOW

Xiang ‘21

(Li Xiang, assistant engineer with the China Shipbuilding Information Center. He has a master’s degree from Renmin University, Beijing, “Artificial intelligence and its impact on weaponization and arms control,” pg online @ <https://www.sipri.org/sites/default/files/2019-10/the_impact_of_artificial_intelligence_on_strategic_stability_and_nuclear_risk_volume_ii.pdf> //um-ef)

In recent years, the maturity of military artificial intelligence (AI) has advanced rapidly. Open source information indicates that the United States, Russia, the United Kingdom, France, China, Japan and the Republic of Korea (South Korea), among other countries, are engaged in such developments. Among the weapons and equipment that have been deployed in various countries, unmanned aerial vehicles (UAVs), unmanned underwater vehicles (UUVs), unmanned surface vessels, battlefield robots and other platforms have been put into use. AI technology based on big data, cloud computing, neural network-based deep learning, computer vision, intelligent robots, natural language processing and speech is of great military value. It can play a key role in intelligence monitoring and reconnaissance, target recog nition, communication and navigation, automated command and control, firepower strikes, and cyber-electromagnetic countermeasures. Because AI enables improvement in the operational effectiveness of weapons and equipment, the future format of warfare is likely to be altered. This essay first analyses (in section I) how AI technology is shaping strategic weaponry in terms of strategic reconnaissance, missile defence, and nuclear command, control and communications (NC3). It then (in sections II and III) reviews these AI-related developments in the realm of cyberspace and lethal autono mous weapon systems (LAWS). It concludes (in section IV) by suggesting means of mitigating the negative impact of some of these developments on traditional arms control. I. Strategic weapons Missile defence and strategic reconnaissance AI can improve the effectiveness of missile defence and enhance target recognition, trajectory calculation and judgement of damage effects. It thereby improves the ability of countries with missile defence systems to offset their opponents’ nuclear retaliation. Further, the application of AI technology has a marked impact on strategic stability among nuclear powers and may undermine the mutual vulnerability and strategic stability of nuclear-armed states of unequal power. Because AI boasts strong capabilities in image and pattern recognition, similar to facial recognition, its ability to recognize still images is strong and it will greatly enhance the effective ness of strategic reconnaissance. By improving the ability to interpret the impact of ai on strategic stability and nuclear risk satellite images and the deep reconnaissance of long-distance UAVs, the country that possesses nuclear superiority will be able to gain further intelligence on the basic characteristics and procedures of its opponent’s nuclear force deployment and movements. This will enhance a country’s confidence in its ability to disarm its opponent’s nuclear weapons with a first strike. When there is a large gap between the nuclear forces of the two countries, this situation will make a preemptive strike by the more powerful one more advantageous, thus weakening the strategic stability of the two countries during a crisis. At sea, AI technology can be used to improve the capability to collect and process a submarine’s sound signature. In anti-submarine warfare, UUVs can also be used to conduct close-range reconnaissance, which can strengthen the capacity to detect and recognize enemy nuclear-powered ballistic missile submarines (SSBNs). On the one hand, this reduces the survivability of the enemy SSBNs, thereby weakening the effectiveness of nuclear deterrence and reducing strategic stability.1 On the other hand, this AI technology can reduce the probability of accidental nuclear war: by improving the ability to identify SSBNs, a country can avoid accidentally hitting an SSBN as part of conventional anti-submarine warfare. Facing the huge quantitative and qualitative advantages of the USA in nuclear weapons, China has maintained a slim and effective retaliatory nuclear force based on mobile strategic missiles with relatively strong concealment, manoeuvrability and survivability. This force is predicated on increasing the opponent’s ‘first-strike uncertainty’ (第一次打击的不确定性) to ensure credible deterrence.2 However, once the USA is able to effectively employ AI technology to improve its reconnaissance capabilities against China’s mobile strategic missiles—enabling discovery of deployment rules, manoeuvring routes and launch site locations—this ‘first strike uncertainty’ would be eliminated. The USA would thereby gain the advantage of being able to decapitate China’s nuclear arsenal. To overcome concerns over this potential, China would have to increase the alert level of its nuclear weapons to ensure the credibility of its deterrent. This would lead to a state in which both sides tend toward pre-emption, weakening the strategic stability of the two countries and increasing the risk of nuclear conflict. In the case of sea-based nuclear deterrence, the employment of AI-based detection technology and offensive UUVs may also have similar effects. In particular, due to the difficulty of underwater communication, it would be difficult for these weapon platforms to receive onshore command and control signals in a timely manner. This would make it difficult to control, much less recall such platforms when engaged in operations.

### 2NC --- Links --- Autonomous Swarms

#### Perception of autonomous subs is enough to trigger the link --- undermines confidence in second strike and triggers destabilization

**Johnson 20** [James Johnson, James has a PhD in Politics and International Relations from the University of Leicester. He is the author of The US-China Military & Defense Relationship During the Obama Presidency. He is also a Postdoctoral Fellow at the James Martin Center for Nonproliferation. 4-16-2020, Taylor & Francis, "Artificial Intelligence, Drone Swarming and Escalation Risks in Future Warfare", <https://www.tandfonline.com/doi/abs/10.1080/03071847.2020.1752026?scroll=top&needAccess=true&journalCode=rusi20> mimou]

Finally, in the maritime domain, UUVs, USVs and UAVs – supported by AI-enabled intra-swarm communication and ISR systems – could be deployed simultaneously in both offensive and defensive ASW operations to saturate an enemy’s defences and locate, disable and destroy its nuclear-armed or non-nuclear attack submarines.67 Tracking a submarine from a ship (or even from another submarine) is a challenging operation even in relatively benign conditions68 because of the stealth technology – especially minimal acoustic signatures – of modern diesel-electric submarines (SSKs) and SSBNs, along with the immense challenge of coordinating such an operation.69 While some experts do not expect a technically reliable and effective capability of this kind to be operational for at least a decade, others are more optimistic.70 From a tactical perspective, drone swarms would not need ocean-wide coverage (or full ocean transparency) to detect and track submarines effectively.71 According to British Rear Admiral John Gower, a relatively even spread of sensors might be sufficient for ‘a viable search and detection plan [to] be conceived for the open ocean’, requiring ‘high tens of thousands or low hundreds of thousands of UUVs’.72 Moreover, advances in mobile sensing platforms could enable drone swarms to locate submarines through chokepoints (or gateways) as they emerge from ports, and then to trail them autonomously.73 In this way, new iterations of machine-learning augmented UUVs and USVs might complement, and perhaps replace entirely, the traditional role of general-purpose SSBNs and manned surface vehicles in tracking and trailing submarines of adversaries at chokepoints, while simultaneously mounting sparsely distributed and mobile-distributed network system sensors on UUVs.74 Algorithm Warfare and Force Majeure Autonomous Weapons If a state views the credibility of its survivable nuclear weapons (especially nuclear-armed submarines) to be at risk, conventional capabilities such as drone swarms will likely have a destabilising effect at a strategic level.75 Thus, even if swarm sorties were not intended as (or indeed technically capable of) a disarming first strike, the perception alone of the feasibility of such an operation would be destabilising. Moreover, the speed of AI could put the defender at a distinct disadvantage, creating additional incentives to strike first (or pre-emptively) at technologically superior military rivals. Consequently, the less secure a state considers its second-strike capabilities to be, the more likely it is to countenance the use of autonomous systems within its nuclear weapons complex to bolster the survivability of its strategic forces. According to analyst Paul Scharre, ‘winning in swarm combat may depend on having the best algorithms to enable better coordination and faster reaction times, rather than simply the best platforms.76 Combining speed, persistence, scope, coordination and battlefield mass, AWS will offer states attractive asymmetric options to project military power within contested anti-access/area denial (A2/AD) zones.77 Enhanced by sophisticated machine-learning neural networks,78 China’s manned and unmanned drone teaming operations could potentially impede future US freedom of navigation operations in the South China Seas.79 Were China to infuse its cruise missiles and hypersonic glide capabilities with AI and autonomy, close-range encounters in the Taiwan Strait, and the East and South China Seas would become more complex, accident-prone and destabilising – at both a conventional and nuclear level.80 China is reportedly developing and deploying UUVs to bolster its underwater monitoring and antisubmarine capabilities, as part of a broader goal to establish an ‘underwater Great Wall’ to challenge US undersea military primacy.81 US AI-enhanced UUVs could, for example, potentially threaten both China’s nuclear ballistic and non-nuclear attack submarines.82 Thus, even if US UUVs were programmed only to threaten China’s non-nuclear (or non-strategic) attack submarine fleets, Chinese commanders might nonetheless fear that China’s nascent and relatively noisy and small (compared with US and Russian SSBNs) sea-based nuclear deterrent could be neutralised more easily.83

### 2NC --- AT: Other Countries Thump

#### Other countries don’t thump – it’s specifically a question of US deployment

Johnson 20 – Dr. James Johnson is a postdoctoral research fellow at the James Martin Center for Nonproliferation Studies (CNS) at the Middlebury Institute of International Studies, Monterey. He holds a PhD in politics and international relations from the University of Leicester, where he is also an honorary visiting fellow with the School of History and International Relations. (James, "Artificial Intelligence: A Threat to Strategic Stability," STRATEGIC STUDIES QUARTERLY, Spring 2020, https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-14\_Issue-1/Johnson.pdf, Accessed 7-2-2022, LASA-SC)

The deployment of new military technology in the nuclear domain, therefore, affects states differently depending on the relative strength of their strategic force structure. Thus, even if US UUVs were programmed only to threaten China’s nonnuclear attack fleets, Chinese commanders might nonetheless fear that their country’s nascent and relatively small— compared to US and Russian SSBN fleets—sea-based nuclear deterrent could be neutralized more easily.77 Moreover, advances in machine learning sensor technology for enabling more accurate detection of Chinese SSBNs would likely reinforce Beijing’s concerns that it was being targeted by a militarily superior power—especially the United States. To test the veracity of this scenario, a better understanding of Chinese thinking on the utility of its nuclear and nonnuclear capabilities—and how it could inform China’s attitude to escalation risk—would be required. Perceived as a relatively low-risk force majeure with ambiguous rules of engagement, and absent a robust normative and legal framework, autonomous weapons will likely become an increasingly attractive asymmetric to erode a militarily superior adversary’s deterrence and resolve.78 In sum, notwithstanding the remaining technical challenges (especially the demand for power), swarms of robotic systems fused with AI machine learning techniques may presage a powerful interplay of increased range, accuracy, mass, coordination, intelligence, and speed in a future conflict.79

### 2NC --- AT: Deterrence

#### Subs fail at deterring but make miscalc likely – comes first in the internal link chain

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Given the confluence of secrecy, complexity, erroneous, or ambiguous intelligence data (especially from open-source intelligence and social media outlets),Footnote110 AI-augmentation will likely exacerbate compressed decision-making and the inherent asymmetric nature of cyberspace information.Footnote111 For example, using AI-enhanced cyber capabilities to degrade or destroy a nuclear-states command and control systems – whether as part of a deliberate coercive counterforce attack or in error as part of a limited conventional strike – may generate pre-emptive ‘use it or lose it’ situations.Footnote112 In a US-China conflict scenario, for instance, a US penchant for counterforce operations targeting adversaries’ command and control, the comingled nature of China's (nuclear and conventional) missile forces, US and Chinese preference for the pre-emptive use of cyberweapons, and domestic-political pressures on both sides to retaliate for costly losses (either physical/kinetic or non-physical/political), increases the dangers of inadvertent escalation.Footnote113

These risks should give defence planners pause for thought using advanced conventional capabilities to project military power in conflicts with regional nuclear powers. In short, conventional doctrines and operational concepts could exacerbate old (for example, third-party interference, civil-military overconfidence, regime type, accidental or unauthorised use, or an overzealous commander with pre-delegation authority) and create new pathways (for example, AI-enhanced ISR and precision missile targeting and guidance, drone swarms, AI-cyberattacks, and mis/disinformation subversion) to uncontrollable inadvertent escalation. Missile defences and advanced conventional weapons are unlikely to prevent these escalatory mechanisms once battlefield perception shifts and the nuclear threshold is crossed.Footnote114

### 2NC --- AT: AI Inevitable

#### Russian AI-subs are in response to NATO threats

Horowitz 19 – Michael C. Horowitz is Professor of Political Science and Associate Director of Perry World House at the University of Pennsylvania. (“A Stable Nuclear Future? The Impact of Autonomous Systems and Artificial Intelligence,” December 2019, <https://arxiv.org/ftp/arxiv/papers/1912/1912.05291.pdf>, Accessed 7-2-2022, LASA-SC)

For example, Russia is reportedly developing a “new intercontinental, nuclear-armed, nuclearpowered, undersea autonomous torpedo.”83 On March 1, 2018, Russian President Vladimir Putin confirmed the existence of an “unmanned underwater vehicle…that would carry massive nuclear ordnance.”84 He characterized the weapon, known as “Status-6” or “Poseidon,” as a response to U.S. investments in missile defenses, which Russian leaders fear could be used alongside longrange non-nuclear precision strike weapons to neutralize Russia’s nuclear deterrent.85 Putin went on to say that Status-6 is designed for use against aircraft carrier groups or coastal targets, and that it would rely on speed, depth, maneuverability, and quietness to reach its target.86 The Russian government has said little about the role of AI in Status-6, but a Russian source suggests that the Status-6 might be able to use AI to evade enemy anti-submarine warfare (ASW) forces on the way to its target.87

### AT: UUVs only Defense

#### China will PERCEIVE the UUVs as offensive --- regardless if they are or not

Zhao ‘18

(Tong, PhD in science, technology, and international affairs from the Georgia Institute of Technology is a fellow in the Nuclear Policy Program at the Carnegie Endowment for International Peace, based at the Carnegie–Tsinghua Center for Global Policy in Beijing. His research focuses on strategic security issues, including nuclear weapons policy, arms control, nonproliferation, missile defense, space security, and other international security issues. He was previously a Stanton nuclear security fellow with the Managing the Atom Project and the International Security Program at the Belfer Center for Science and International Affairs at Harvard University. He has held a number of other positions, including as a nonresident WSD-Handa fellow at Pacific Forum CSIS and working for the Office of Foreign Affairs of the People’s Government of Beijing Municipality. He holds a and received a BS in physics and an MA in international relations from Tsinghua University, “Tides of Change,” pg online @ <https://carnegieendowment.org/files/Zhao_SSBN_final.pdf> //um-ef)

So far, the United States has been relatively restrained in its use of unmanned systems for ASW missions. A RAND report observes that, to date, the main U.S. objective in using UUVs for ASW has been “to conduct ASW operations short of weapons engagement.”15 That said, the report does note that a “further objective is to perform this function [of weapons engagement].” For their part, Chinese analysts expect that the United States will deploy the most advanced unmanned ASW first to the Asia Pacific and that China will be the primary target. They expect Washington to deploy an ASW-capable USV as early as 2018. Unmanned ASW platforms are expected to be deployed first along the First Island Chain and at U.S. bases in Singapore; Okinawa, Japan; the Philippines; and Australia to monitor Chinese submarines operating in the East and South China Seas as they transit through the region’s limited number of chokepoints.16

### AT: Nuclear Primacy

#### Nuclear primacy fails and overconfidence is dangerous---even limited nuclear war causes extinction

Starr, ’14 Steven Starr, the Senior Scientist for Physicians for Social Responsibility and Director of the Clinical Laboratory Science Program at the University of Missouri. Starr has published in the Bulletin of the Atomic Scientists and the Strategic Arms Reduction (STAR) website of the Moscow Institute of Physics and Technology, June 11th, 2014, “There Can be No Winners in a Nuclear War”, Truth Out, <https://truthout.org/articles/there-can-be-no-winners-in-a-nuclear-war/>, EO

Nuclear war has no winner. Beginning in 2006, several of the world’s leading climatologists (at Rutgers, UCLA, John Hopkins University, and the University of Colorado-Boulder) published a series of studies that evaluated the long-term environmental consequences of a nuclear war, including baseline scenarios fought with merely 1% of the explosive power in the US and/or Russian launch-ready nuclear arsenals. They concluded that the consequences of even a “small” nuclear war would include catastrophic disruptions of global climate and massive destruction of Earth’s protective ozone layer. These and more recent studies predict that global agriculture would be so negatively affected by such a war, a global famine would result, which would cause up to 2 billion people to starve to death. These peer-reviewed studies – which were analyzed by the best scientists in the world and found to be without error – also predict that a war fought with less than half of US or Russian strategic nuclear weapons would destroy the human race. In other words, a US-Russian nuclear war would create such extreme long-term damage to the global environment that it would leave the Earth uninhabitable for humans and most animal forms of life. A recent article in the Bulletin of the Atomic Scientists, “Self-assured destruction: The climate impacts of nuclear war,” begins by stating: “A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by either side could be suicidal, resulting in self-assured destruction.” In 2009, I wrote “Catastrophic Climatic Consequences of Nuclear Conflicts” for the International Commission on Nuclear Non-proliferation and Disarmament. The article summarizes the findings of these studies. It explains that nuclear firestorms would produce millions of tons of smoke, which would rise above cloud level and form a global stratospheric smoke layer that would rapidly encircle the Earth. The smoke layer would remain for at least a decade, and it would act to destroy the protective ozone layer (vastly increasing the UV-B reaching Earth) as well as block warming sunlight, thus creating Ice Age weather conditions that would last 10 years or longer. Following a US-Russian nuclear war, temperatures in the central US and Eurasia would fall below freezing every day for one to three years; the intense cold would completely eliminate growing seasons for a decade or longer. No crops could be grown, leading to a famine that would kill most humans and large animal populations. Electromagnetic pulse from high-altitude nuclear detonations would destroy the integrated circuits in all modern electronic devices, including those in commercial nuclear power plants. Every nuclear reactor would almost instantly meltdown; every nuclear spent fuel pool (which contain many times more radioactivity than found in the reactors) would boil off, releasing vast amounts of long-lived radioactivity. The fallout would make most of the US and Europe uninhabitable. Of course, the survivors of the nuclear war would be starving to death anyway. Once nuclear weapons were introduced into a US-Russian conflict, there would be little chance that a nuclear holocaust could be avoided. Theories of “limited nuclear war” and “nuclear de-escalation” are unrealistic. In 2002 the Bush administration modified US strategic doctrine from a retaliatory role to permit preemptive nuclear attack; in 2010, the Obama administration made only incremental and miniscule changes to this doctrine, leaving it essentially unchanged. Furthermore, Counterforce doctrine – used by both the US and Russian military – emphasizes the need for preemptive strikes once nuclear war begins. Both sides would be under immense pressure to launch a preemptive nuclear first-strike once military hostilities had commenced, especially if nuclear weapons had already been used on the battlefield. Both the US and Russia each have 400 to 500 launch-ready ballistic missiles armed with a total of at least 1800 strategic nuclear warheads, which can be launched with only a few minutes warning. Both the US and Russian Presidents are accompanied 24/7 by military officers carrying a “nuclear briefcase,” which allows them to transmit the permission order to launch in a matter of seconds. Yet top political leaders and policymakers of both the US and Russia seem to be unaware that their launch-ready nuclear weapons represent a self-destruct mechanism for the human race. For example, in 2010, I was able to publicly question the chief negotiators of the New START treaty, Russian Ambassador Anatoly Antonov and (then) US Assistant Secretary of State Rose Gottemoeller, during their joint briefing at the UN (during the Non-Proliferation Treaty Review Conference). I asked them if they were familiar with the recent peer-reviewed studies that predicted the detonation of less than 1% of the explosive power contained in the operational and deployed US and Russian nuclear forces would cause catastrophic changes in the global climate, and that a nuclear war fought with their strategic nuclear weapons would kill most people on Earth. They both answered “no.” More recently, on April 20, 2014, I asked the same question and received the same answer from the US officials sent to brief representatives of the NGOS at the Non-Proliferation Treaty Preparatory Committee meeting at the UN. None of the US officials at the briefing were aware of the studies. Those present included top officials of the National Security Council. It is frightening that President Obama and his administration appear unaware that the world’s leading scientists have for years predicted that a nuclear war fought with the US and/or Russian strategic nuclear arsenal means the end of human history. Do they not know of the existential threat these arsenals pose to the human race . . . or do they choose to remain silent because this fact doesn’t fit into their official narratives? We hear only about terrorist threats that could destroy a city with an atomic bomb, while the threat of human extinction from nuclear war is never mentioned – even when the US and Russia are each running huge nuclear war games in preparation for a US-Russian war. Even more frightening is the fact that the neocons running US foreign policy believe that the US has “nuclear primacy” over Russia; that is, the US could successfully launch a nuclear sneak attack against Russian (and Chinese) nuclear forces and completely destroy them. This theory was articulated in 2006 in “The Rise of U.S. Nuclear Primacy,” which was published in Foreign Affairs by the Council on Foreign Relations. By concluding that the Russians and Chinese would be unable to retaliate, or if some small part of their forces remained, would not risk a second US attack by retaliating, the article invites nuclear war. Colonel Valery Yarynich (who was in charge of security of the Soviet/Russian nuclear command and control systems for 7 years) asked me to help him write a rebuttal, which was titled “Nuclear Primacy is a Fallacy.” Colonel Yarynich, who was on the Soviet General Staff and did war planning for the USSR, concluded that the “Primacy” article used faulty methodology and erroneous assumptions, thus invalidating its conclusions. My contribution lay in my knowledge of the recently published (in 2006) studies, which predicted even a “successful” nuclear first-strike, which destroyed 100% of the opposing side’s nuclear weapons, would cause the citizens of the side that “won” the nuclear war to perish from nuclear famine, just as would the rest of humanity.

### Impacts --- NW = Ext

#### Extinction---counter-forcing is impossible.

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## China-Specific Work

### Links --- UUV = Destablize China

#### New autonomous subs fuel nuclear competition with China

Zhao ‘18

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New technologies, especially autonomous and unmanned systems, could further fuel the emerging nuclear dimension of the naval competition between China and the United States. In particular, U.S. efforts to intensify its development and use of unmanned systems could greatly expand U.S. ASW capabilities in destabilizing ways that China would view as threatening to the survivability of its SSBNs. To avoid being disadvantaged, China would likely be prompted to counter by building more unmanned systems of its own and adopting more destabilizing military countermeasures.

### Links --- Mapping

#### China will perceive the plan as attempts to spy on Chinese SSBNs --- risks escalation

Zhao ‘18

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If unmanned systems turn out to be capable of substantially upsetting the offense-defense balance in underwater warfare, they could provoke an unforeseen radical change to the future survivability of Beijing’s sea-based nuclear deterrent. In recent years, China has captured foreign unmanned underwater vehicles (UUVs) close to Hainan Island in the South China Sea. The country’s national security agencies suspect that these UUVs are monitoring Chinese military vessels and collecting other forms of close-in intelligence, such as mapping the seabed and gathering hydrographic information.1 Chinese analysts are particularly concerned that UUVs and unmanned surface vehicles (USVs) are being used to spy on Chinese SSBNs operating in the area, survey their operational environment, and even directly threaten them with offensive weapons.2 This analysis focuses more on the impact of UUVs, which is generally considered representative of the impact of other types of unmanned maritime systems including USVs. The United States tops the list of Chinese concerns about the development and deployment of unmanned systems. Since 1994, the U.S. Navy has published four Navy Unmanned Undersea Vehicle (UUV) Master Plans.3 Since the publication of the second master plan in 2000, the U.S. Navy has increasingly focused on using UUVs for ASW missions. This trend is reflected in other U.S. defense planning documents, including the Department of Defense’s Unmanned Systems Roadmaps, which were later renamed Unmanned Systems Integrated Roadmaps.4

### Links --- SCS War

#### Integrating AI is perceived as threat to Chinese nuclear deterrence in the SCS---greenlights conflict AND escalation through use it or lose it pressures

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Finally, in the maritime domain, unmanned underwater vessels (UUV), unmanned surface vessels (USV), and UAVs supported by AI-enabled intra-swarm communication and ISR systems could be deployed simultaneously in both offensive and defensive antisubmarine warfare operations to saturate an enemy’s defenses and to locate, disable, and destroy its nuclear-armed or nonnuclear attack submarines.64 Despite continued advances in sensor technology design (e.g., reduced size and extended detection ranges) to overcome quieting challenges, other technical challenges still remain. These include communicating underwater between multiple systems, processing power requirements, generating battery life and energy, and scaling the system. 65 Q2019-07-08 AI Strategic Stability 9958 13 While some experts do not expect a technically reliable and effective capability of this kind will be operational for at least a decade, others are more optimistic.66 From a tactical perspective, drone swarms would not need ocean-wide coverage (or full ocean transparency) to effectively detect and track submarines. According to UK rear admiral John Gower, a relatively even spread of sensors might be sufficient to enable “a viable search and detection plan . . . conceived for the open ocean” (emphasis added).67 Moreover, advances in mobile sensing platforms could enable drones in swarms to locate submarines through chokepoints (or gateways) as they emerge from ports. Due to the current slowness of drones with extended sea ranges, however, trailing them autonomously seems implausible.68 Future iterations of machine-learning-augmented UUVs and USVs may eventually complement, and perhaps replace entirely, the traditional role of general-purpose nuclear-powered submarines (SSN) and manned surface vehicles in tracking and trailing submarines of adversaries at chokepoints while simultaneously mounting sparsely distributed and mobile distributed network systems (DNS) sensors on UUVs. 69 If a state views the credibility of its survivable nuclear weapons (especially nuclear-armed submarines) to be at risk,70 conventional capabilities such as drone swarms will likely have a destabilizing effect at a strategic level.71 Thus, even if swarm sorties were not intended as (or indeed technically capable of) a disarming first strike, the perception alone of the feasibility of such an operation would be destabilizing nonetheless. Moreover, the speed of AI could put the defender at a distinct disadvantage, creating additional incentives to strike first (or preemptively) technologically superior military rivals. Consequently, the less secure a nation considers its second-strike capabilities to be, the more likely it is to countenance the use of autonomous systems within its nuclear weapons complex to bolster the survivability of its strategic forces. According to analyst Paul Scharre, “winning in swarm combat may depend upon having the best algorithms to enable better coordination and faster reaction times, rather than simply the best platforms” (emphasis added).72 Combining speed, persistence, scope, coordination, and battlefield mass, AWS will offer states attractive asymmetric options to project military power within contested A2/AD zones.73 Enhanced by sophisticated machine learning neural networks, China’s manned and unmanned drone teaming operations could potentially impede future US freedom of navigation operations in the South China Seas.74 Its air- and sea-based drones linked to sophisticated neural networks could, for example, support the People’s Liberation Army’s manned and unmanned teaming operations. Were China to infuse its cruise missiles and hypersonic glide capabilities with AI and autonomy, close-range encounters in the Taiwan Straits and the East and South China Seas would become more complicated, accident-prone, and destabilizing—at both a conventional and nuclear level.75 China is reportedly developing and deploying UUVs to bolster its underwater monitoring and antisubmarine capabilities as part of a broader goal to establish an “underwater Great Wall” to challenge US undersea military primacy. US AI enhanced UUVs could, for example, theoretically threaten both China’s nuclear ballistic and nonnuclear attack submarines.76 The deployment of new military technology in the nuclear domain, therefore, affects states differently depending on the relative strength of their strategic force AI Strategic Stability structure. Thus, even if US UUVs were programmed only to threaten China’s nonnuclear attack fleets, Chinese commanders might nonetheless fear that their country’s nascent and relatively small—compared to US and Russian SSBN fleets—sea-based nuclear deterrent could be neutralized more easily.77 Moreover, advances in machine learning sensor technology for enabling more accurate detection of Chinese SSBNs would likely reinforce Beijing’s concerns that it was being targeted by a militarily superior power— especially the United States. To test the veracity of this scenario, a better understanding of Chinese thinking on the utility of its nuclear and nonnuclear capabilities—and how it could inform China’s attitude to escalation risk—would be required

### Links --- Perception k

#### Perception of the plan is enough to trigger the link --- China will assume UUVs are offensive risks to their nuclear subs

Zhao ‘18

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If the United States were to use UUVs to help hold Chinese SSBNs at risk—or even if Beijing believed U.S. UUVs were being used in this way—there would be a chance that the Chinese surface ships and aircraft tasked with protecting SSBNs might misunderstand the intentions behind specific maneuvers conducted by U.S. unmanned systems. An unmanned mission for collecting intelligence against nearby Chinese SSBNs could be misinterpreted as cueing subsequent ASW strikes. In addition, there would be a chance that Chinese forces might mistakenly assume that foreign UUVs and USVs tasked with general surveillance are specifically targeting Chinese SSBNs.

### Links --- China Attacks UUV

#### China will attack UUVs --- Causes U.S. retaliation and escalation

Zhao ‘18

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In a scenario in which Chinese forces believed one of their SSBNs was threatened, they would face only two realistic options: either leaving the foreign UUV or USV alone—potentially putting the SSBN at risk—or using physical force to disrupt the unmanned foreign system’s operations, whether by capturing it or by attempting to destroy it. In such a case, it would be very difficult for China to signal that its intentions were defensive. Washington, in turn, could interpret Chinese interference with a U.S. UUV or USV as a provocation or the use of force, especially during a crisis. Indeed, Beijing has recently signaled its willingness to interfere with unmanned systems. After the December 2016 incident in which a PLA Navy ship seized a U.S. UUV in the South China Sea, an article published through an account managed by the overseas edition of the People’s Daily argued that there is currently no international law that regulates the maritime activities of unmanned systems. This line of reasoning states that, unlike manned vessels, unmanned systems do not enjoy a right to freedom of navigation and, therefore, “in this grey area, as long as the United States dares to send its underwater drones [to China’s coastal waters], China certainly has the right to seize them.”22

### Nuclear Deterrence Link

#### AUVs and UUVs actively complicate and undermine deterrence

Sylvia Mishra 19, Sylvia Mishra is a New Tech Nuclear Officer at the European Leadership Network and a doctoral researcher at the Department of Defence Studies, King’s College London , 5/8/19, “Could unmanned underwater vehicles undermine nuclear deterrence?” *The Strategist*, <https://www.aspistrategist.org.au/could-unmanned-underwater-vehicles-undermine-nuclear-deterrence/>, JH

Nuclear deterrence rests on the ability of strategic assets to survive an enemy’s first strike and to retaliate, ensuring mutually assured destruction.

Nuclear-powered ballistic-missile submarines (SSBNs) are considered to be the most survivable of all nuclear platforms due to their stealth capabilities, mobility and discretion. Placing nuclear assets underwater puts them at a safer distance from a crippling first strike. But as technology improves and the ocean battlefield becomes more complex, these advances could undermine the survivability of strategic forces around the world and make them far more vulnerable.

Emerging technologies like unmanned underwater vehicles (UUVs) add to the complexity of the battle space and disrupt the status quo. Swarms of autonomous underwater drones could be deployed to hunt ballistic-missile submarines, targeting a cornerstone of nuclear deterrence.

In their 2017 [article](https://www.belfercenter.org/publication/new-era-counterforce-technological-change-and-future-nuclear-deterrence) ‘The new era of counterforce’, Keir A. Lieber and Daryl Press argue that for most of the nuclear age, the survivability of retaliatory forces seemed straightforward. However, improvements in counterforce technology have eroded this cornerstone of nuclear deterrence. As new technology continues to raise the potential for major shifts in the military realm, the rapid advent of these drones may reduce the credibility and effectiveness of SSBNs.

UUVs can function without the direction of a human operator and have wide [dual-use (that is, civilian and military) applications](https://www.simulyze.com/blog/from-land-to-sea-5-ways-drones-are-impacting-underwater-operations). Some are used for commercial purposes, hydrography and oceanographic research. Lockheed Martin’s yellow Marlin drone submarine [inspects](https://www.reuters.com/article/us-lockheed-marlin/weapons-maker-lockheed-builds-submarine-for-oil-rigs-idUSBRE87300D20120804) offshore rigs and underwater pipelines, a task that’s worth around a billion dollars a year in the Gulf of Mexico.

But UUV technologies have been evolving from defensive to more offensive roles. UUVs increasingly play a [critical role in antisubmarine warfare](https://www.csmonitor.com/USA/Military/2014/0716/Military-ramps-up-use-of-underwater-drones.-What-do-they-do) (ASW) and perform missions such as placing and monitoring sensors on the sea floor to track enemy submarines. They can gather intelligence on opponents, detect and neutralise mines, hunt submarines and chart the ocean floor. They could, potentially, detonate warheads. And they could take part in a coordinated attack on an enemy submarine in conjunction with ‘friendly’ submarines and surface vessels.

The United States, Russia and China are investing in this technology to bolster their ASW capability and it’s evident that UUVs will be deployed in the near future in combat operations.

The US Navy released a [UUV masterplan](https://www.navy.mil/navydata/technology/uuvmp.pdf) in 2004 that set out nine priority areas for future UUV capabilities. In 2015, Brigadier General Frank Kelly became the [first deputy assistant secretary of the US Navy for unmanned systems](https://news.usni.org/2015/10/27/retired-brig-gen-frank-kelley-named-first-ever-deputy-assistant-secretary-of-the-navy-for-unmanned-systems). In 2016, the Department of Defense [reportedly spent](http://www.kemplon.com/how-submarine-drones-are-changing-the-naval-modus-operandi/) US$232.9 million on procuring UUVs (US$86.7 million more than in 2015). In 2018, the US Office of Naval Research [awarded Raytheon](https://navaltoday.com/2018/06/28/raytheon-wins-contract-for-locus-inp/) a US$29.7 million contract for developing a naval prototype of a ‘low-cost UAV swarming technology’, or LOCUST, system that can overwhelm an adversary.

Russia and China aren’t far behind. Several [reports](https://www.popularmechanics.com/military/navy-ships/a22593766/russia-working-on-new-cephalopod-underwater-attack-drone/) indicate that Russia has been working on a ‘killer underwater drone’ since 2015. The ‘Cephalopod’ is designed for the underwater battlefield. Undersea warfare expert H.I. Sutton [says](https://www.popularmechanics.com/military/navy-ships/a22593766/russia-working-on-new-cephalopod-underwater-attack-drone/) that it can target shipping but its torpedoes are intended to destroy submarines. In a March 2018 speech to the Federal Assembly of the Russian Federation, President Vladimir Putin [highlighted](https://www.bbc.com/news/world-europe-43239331) Russian military development of an underwater drone aimed at transforming underwater warfare. A RAND Corporation [report](https://www.rand.org/pubs/research_reports/RR990.html), Emerging trends in China’s development of unmanned systems, said Beijing had been funding 15 different universities for research programs for UUVs. Reports [indicate](https://www.scmp.com/news/china/society/article/2156361/china-developing-unmanned-ai-submarines-launch-new-era-sea-power) that China is also developing low-cost unmanned UUVs for a variety of military applications, including ‘suicide’ attacks on enemy vessels.

These trends indicate that the proliferation of UUVs will have an impact on the stability of the undersea warfighting domain. Emerging capabilities suggest that the sea-based leg of the triad of missile submarines, land-based intercontinental ballistic missiles and crewed bombers will increasingly become vulnerable.

However, some experts argue that underwater drone technology is still in a nascent stage of development and faces challenges in autonomous operations and communication. The density of seawater makes it difficult for UUVs to complete complex tasks that require real-time decision-making. Former Chief of US Naval Operations Admiral Jonathan Greenert [noted](https://www.wsj.com/articles/underwater-drones-join-microphones-to-listen-for-chinese-nuclear-submarines-1414166607) that one of the biggest obstacles for underwater drones is that they run on batteries that last only a few hours and communication is difficult because data passes very slowly through water.

It will take time for underwater drone technology to mature and pose a serious threat to well-hidden SSBNs, but when drones swarm in packs, it will become harder for submarines to escape detection. Advances in UUV technology will undermine the stability of deterrence and usher in a new underwater arms race that will increase the risks of escalation in a crisis.

As countries expand their underwater drone inventories, managing and controlling them could become challenging. It’s vital that operating nations develop a global code of conduct for their use.

### 2NC --- China not revisionist

#### China’s a purely defensive nuclear power---empirical record overwhelmingly goes affirmative.

Pan 18

(Major General Pan Zhenqiang (retired) is deputy chairman of the China Foundation for International Studies, senior adviser to the China Reform Forum and director of research at the Institute for Strategy and Management of the Central University of Finance and Economics in China. He is also a member of the Executive Committee of the Council of Pugwash Conferences on Science and World Affairs., "A Study of China’s No-First-Use Policy on Nuclear Weapons," Journal For Peace And Nuclear Disarmament Volume 1, 2018 - Issue 1)

How should one understand China’s no-first-use nuclear policy? In its very first official statement on the no-first-use nuclear policy, the Chinese government purposefully chose powerful expressions, such as “at any time” and “under any circumstances,” to stress that this pledge is absolute, unconditional, and crystal clear. This fact has four implications. First, the unconditional no-first-use policy means that in China’s security calculation, nuclear weapons play only one role: to deter other states from attacking China with nuclear weapons. Simply put, if you do not use or threaten to use nuclear weapons against China, then China’s nuclear arsenal is no threat to you. If you choose to launch nuclear attacks on China, you must anticipate nuclear retaliation, most likely in the form of counterattacks on several large cities that would demonstrate the “unbearable and disastrous consequences” that accompany the use of nuclear weapons. Following this logic, China hopes to achieve its objective of deterring any state from resorting to the nuclear option against China. In short, China’s n**o**firstuse commitment reflects the purely defensive nature of its nuclear policy. In this respect, China’s strategy that is aimed at deterring a nuclear attack differs fundamentally from the deterrence strategy pursued by the Western nuclear community. It aims strictly to prevent a nuclear war, whereas the deterrence strategy long maintained by other nuclear powers, particularly the United States and the USSR (now Russia), is based on preparing to win a nuclear war and is offensive in nature. This offensive strategy caused the US and the USSR to enter into a near-crazy nuclear arms race, escalating to a total of more than 70,000 warheads at the peak of the Cold War, far beyond any rational defensive needs. The US nuclear strategy has another striking feature: it is also applicable to non- nuclear-weapon states. Particularly with respect to those states considered unfriendly or disobedient, the US presents its nuclear weapons as a principal means of military threat and political blackmail, using its nuclear strategy as a powerful pillar to dominate the world. Intent on disassociating itself from Western deterrence theory, the Chinese government has little interest in going along with those Western defense analysts (as well as some nuclear theorists in China itself) who try to observe China’s nuclear strategy through the lens of the Western deterrence concept and who describe China’s nuclear doctrine with such labels as “limited deterrence” or “minimum deterrence” (Xu 1987, 366–369; Chen 1989, 214; Yang 1990, 407–411).3 China believes that these are specious interpretations that blur the clearly self-defensive nature of its nuclear strategy. Second, its unconditional nofirstuse policy implies that China has no need to engage in an arms race with other nuclear weapon states. No doubt, China must maintain a survivable nuclear force that can withstand the first wave of nuclear attacks with sufficient counterattack capability. However, China believes it is much more practical and sensible to keep its nuclear weapon development at that level than to pursue a strategy like that of the US and the USSR (Russia), which led inevitably to a nuclear arms race during the Cold War. Throughout those decades of rivalry, the two nuclear superpowers had to stand ready to strike first, thereby plunging themselves into a paranoid mindset. They never knew how much nuclear strike capability was sufficient, and they constantly worried about being overtaken by the other country. Each side, never sure when the other might launch the first bomb, remained constantly at the highest possible “launch on warning” alert; each exaggerating the other’s nuclear capabilities and proceeding with its own nuclear armament and readiness planning based on the worst-case scenario. From China’s perspective, a strategy containing these elements is the root cause of the escalating risk of a nuclear war. China has never been bothered by such over-anxiety or over-action in its nuclear thinking. China believes that to prevent a nuclear war from happening, it is sufficient to target just a few big cities for retaliation; thus it is not necessary to build a huge arsenal or develop massive offensive capabilities. Since acquiring its own nuclear capability in 1964, China has conducted the least number of nuclear tests among the five Nuclear Nonproliferation Treaty (NPT) nuclear weapon states, and it has maintained only a minimum number of warheads throughout that time. Also notably, China sees no need to develop non-strategic nuclear weapons, such as tactical nuclear weapons, which in China’s view are primarily for use on the battlefield; to develop so-called precision- strike nuclear war-fighting capabilities; or to deploy nuclear weapons on the soil of other countries. Furthermore, China considers it unnecessary to keep its nuclear forces at the launch-on-warning alert level, because it is prepared only to mount counter- attacks if attacked. Before any counterattack takes place, China must first determine whether the attack against China is of a nuclear nature and who the attacker is. Such investigation and verification will be time-consuming. In fact, China generally keeps its warheads away from intercontinental ballistic missile (ICBM) launchers, installing them only when launching becomes necessary. This approach not only improves the survivability of its nuclear force but also, more importantly, tells the world that China’s nuclear posture is never offensive. All these are logical effects of the nofirs**t**use policy, which indeed determines China’s nuclear posture, including the mission, size, and structure of its nuclear weapons, as well as the doctrine governing them. For this reason, the common depiction of China’s nofirstuse policy as unverifiable rhetoric is demonstrably groundless. Currently, along with its technological and political development, China, like other nuclear weapon states, is also modernizing its array of nuclear armaments, particularly by enhancing the surety, reliability, and effectiveness of its ballistic missiles. This includes, among others, building a nuclear triangle focusing on land- launching ICBMs complemented by bombers and submarines. China is also strengthening its capacity for rapid reaction, effective penetration, conventional precision strikes, damage infliction, and its own protection and survivability. All these actions are geared toward effectively handling future war threats and emergencies. And all these steps, as pointed out by China’s Defense White Paper, have been taken in line with the country’s pledge never to be the first to resort to nuclear weapons (Information Office of the State Council (China) 2013, 12). In short, the no-first-use policy keeps China out of an arms race with other states, and this healthy mindset allows China to proceed with its nuclear modernization programs at a more measured and unruffled pace, in conformity with its national defense needs and within the limits of its overall national strength. Third, the unconditional no-first-use policy also means that nuclear development is not considered a way of compensating for any shortage of conventional capabilities in China’s overall military planning. This is another important factor distinguishing China’s nuclear strategy from that of other nuclear powers. In the eyes of other nuclear powers, nuclear weapons, other than being more powerfully destructive, are not qualitatively different from conventional weapons; both are ready and available for use in the battlefield. In the early years of the Cold War, when the US enjoyed first a nuclear monopoly and later nuclear superiority over the USSR but lagged behind in terms of conventional forces, it waved nuclear bombers as a trump card in its massive retaliation plan. In those years, Washington planned that if war should erupt with the USSR, it would immediately use nuclear weapons to crush the enemy. But soon, the Soviets caught up with the US nuclear capability while maintaining a superior conventional posture relative to NATO’s deployment in Europe. By this time, the latter alliance was forced to abandon the idea of winning the war through massive nuclear attacks. But the US and NATO were still prepared to use nuclear weapons first as an effective firewall to stop an offensive by Warsaw Pact conventional forces. With the end of the Cold War and the breakup of the Warsaw Pact, the confrontation persisted between the two factions, with the US and the NATO on one side, and Russia, which retained the legacy of the Soviet era, on the other side. But the two sides now seem to have swapped positions, with Russia on the weak side, particularly with regard to conventional weapons. It is, thus, now Russia’s turn to follow the same path that the Western bloc had adopted during the Cold War era, offsetting its conventional inferiority with its nuclear arsenal. Soon after the end of the Cold War, in November 1993, Russia announced that it was abandoning its pledge not to use nuclear weapons first, emphasizing that in a future major military conflict with the West, it would launch a first strike if deemed necessary – although many believe that the USSR was never serious about its no-first-use pledge during the Cold War. Britain and France, the two next-tier nuclear states, also cling to the position of willingness to use nuclear weapons first, even though as members of NATO they are already under the US nuclear umbrella at least theoretically. Their calculation seems to be that, if they were to give up this position, their status as global powers would be substantially undermined and their status within NATO greatly impaired. Another consideration behind these countries’ threat to use nuclear weapons first is the desire to maintain their traditional interests in specific regions of the world, such as the Middle East and Africa.4 China has taken an approach fundamentally different from the other NPT nuclear weapon states. Its no-first-use pledge demonstrates that China does not plan to offset its relatively weak conventional strength (vis-à-vis the US, for example) with its nuclear capabilities, nor would it consider resorting to nuclear weapons first in a conventional conflict. There are at least two reasons for this approach. One reason is that China deeply understands the huge, devastating consequences of the use of nuclear weapons, including the massive and inhumane damage that would be perpetrated on both sides, and especially on innocent people. Furthermore, China believes that a disconnection between nuclear and conventional forces may be in China’s best interests. The nofirst- use policy was formulated by the first-generation leaders of the newly founded republic in 1949; all these leaders had experienced long revolutionary wars and had little taste for engaging in another large-scale conventional war. In their vision of a next war involving China, there was no role for China as an invader; rather, China would be the invaded country, meaning that the war would be on China’s soil. Such a war was quite familiar to leaders like Mao Zedong and Zhou Enlai. They were confident that under the Communist Party’s leadership, and with its disciplined military force supported by the people, China could fight a prolonged people’s war, using inferior weapons to vanquish its technically superior enemies, who would eventually drown in “the sea of people’s war” (Sun 2006). This strategic thinking, passed down from the forefathers, continues to be deeply imprinted in the minds of their successors and serves as important guidance shaping the no-first-use policy regarding nuclear weapons. Finally, the unconditionaln**o**-first-use policy indicates that China does not intend to employ nuclear weapons as a foreign-policy tool to advance its national interests. This view arises from China’s socialist system, which has consistently supported a non-allied, independent foreign policy of peaceful coexistence. In sharp contrast, the US acted in exactly the opposite way. By providing “extended nuclear deterrence” to its allies, the US sought from the onset to control these countries and prevent them from developing indigenous nuclear weapons, keeping them dependent on a global security system dominated by Washington. Such arrangements may have worked for some time, but whether they could work permanently is a big question. Many of these allies have never become fully reconciled to putting their fate in US hands and have desired to break away from the US control from time to time, giving rise to complicated frictions in the alliances. China has no such problems. It stands firm, not forming a military alliance with any other state nor using nuclear weapons as a means to control or influence another state’s policy. This position is consistent with its no-first-u**se** pledge.

### Impacts --- Stab k NW

#### Stability and confidence in second strike ensures MAD and deterrence --- the aff’s perception change is the ONLY chance for a U.S.-China War

Colby and Denmark 13

(Elbridge A. Colby, Robert M. Gates Senior Fellow at the Center for a New American Security, and Abraham M. Denmark, United States Deputy Assistant Secretary of Defense for East Asia, March 2013, “Nuclear Weapons and U.S.-China Relations: A Way Forward”, https://csis-prod.s3.amazonaws.com/s3fs-public/legacy\_files/files/publication/130307\_Colby\_USChinaNuclear\_Web.pdf)

To gain the benefits of strategic stability, the Working Group believes that nuclear relations between the United States and China should emphasize two complementary approaches: crisis stability and arms race stability. Crisis stability emphasizes the need to minimize pressure on either side to be the first to use nuclear weapons based on perceived advantage or vulnerability. It thus emphasizes the need for a strategic dynamic in which both sides see that launching their nuclear weapons first to avoid being disarmed or to try to disarm one’s opponent is unnecessary and unwise. Arms race stability focuses on the longer term and emphasizes controlling the dynamics of arms competition that can affect the strategic balance, and specifically calculations associated with first-strike stability. The Working Group believes these concepts can even be highly useful in relations between two countries that have asymmetric capabilities such as the United States and China. Such concepts do not demand that two nations have the same or similar numbers or types of forces. Rather, they are adaptable goals that can be fitted to the situation that exists between the United States and China. Based on this concept, stability can emerge between the United States and China if they each field forces that are capable of surviving a first strike and if they are able to credibly demonstrate to the other side that their current and future capabilities are unable to deny the other side a viable strategic deterrent. As a result, fear of preemption and the need to launch weapons early become irrelevant, either as irritants in crisis or as dangers in conflict. In this way, the benefits of deterrence can be retained while minimizing the chances of nuclear escalation. The premise of arms control and stability-oriented measures is that even potential adversaries can achieve the twin goals of both effective nuclear deterrence and mitigation of the possibility of conflict between them. This is because nuclear forces themselves can intensify, if not cause, competition and even conflict—but they need not. Nuclear deterrence is not simply a unilateral action that takes places in a vacuum; rather, it is a relationship shaped by perceptions. Indeed, the ways in which a country procures, postures, and operates its nuclear forces have a major interactive effect on how other countries procure, posture, and operate their forces. Potential adversaries can allay, and possibly even remove, these exacerbating factors through unilateral and cooperative measures that effectively demonstrate that each side’s strategic forces are not capable of conducting a disarming first strike. Such measures do not solve more fundamental political and strategic disputes, but they can help to lessen tensions and mistrust stemming from the essentially ancillary technical features of interstate relations. Both sides could derive value from cooperation on nuclear weapons grounded in the stability concept. The United States worries about the composition of China’s nuclear force, Chinese views on escalation and plans for nuclear use, and the future trajectory of China’s strategic posture. Meanwhile, China worries that the United States may be able or seek to be able to deny it a second-strike capability, and it worries about the scope and sophistication of future U.S. programs, as well as U.S. unwillingness to acknowledge a condition of mutual vulnerability between the two nations. A stability-grounded model could help address these anxieties—on the U.S. side by providing greater insight into China’s current and future force structure and deeper insight into China’s ways of thinking about nuclear strategy, and on the Chinese side by providing similar insight into U.S. developments and a greater degree of assurance about U.S. acknowledgment of the survivability of China’s force. Concurrently, such an approach would have the added benefit of building confidence on both sides. Finally, such a model could provide a satisfactory method through which China could see something approximating its current force size, posture, and doctrine as satisfactory and compatible with stability.

### Impacts --- LOW = Acc War

#### Chinese Launch on Warning causes accidental nuclear conflict

David Santoro 19, PhD, Director and Senior Fellow for Nuclear Policy, Pacific Forum International, 6/20/19, Testimony before the U.S.-China Economic Security Review Commission, https://www.uscc.gov/sites/default/files/Santoro\_USCC%20Testimony\_FINAL.pdf

Furthermore, Washington has been worried that China’s evolving nuclear capabilities will present Beijing with new, problematic strategic options and create significant command, control, and communication (C3) issues. For starters, the Chinese modernization program could lead Beijing to change its stance on nuclear counterattack: it could adopt a launch-on-warning (LOW) posture, abandoning its traditional stance to retaliate only after it has absorbed a nuclear strike. The improved mobility, readiness, and informatization of SAF assets and the PLA’s space-based early-warning system have increasingly made adoption of such a posture possible. The emerging nuclear roles of the PLAN and PLAAF will make it even easier because nuclear warheads have to be mated with delivery systems on sea and air platforms. Is an LOW posture compatible with an NFU policy, especially given that Beijing has often pointed to its de-mated posture as evidence that it abides by NFU principles? Another area of possible change concerns Chinese thinking about adopting a limited nuclear warfighting posture as a result of the increasing commingling and co-location of its nuclear and conventional assets, the diversification of its nuclear forces (notably its emerging nuclear triad), and its work to enhance “integrated strategic deterrence.” 21 Could these developments lead Beijing to endorse warfighting as an option for its nuclear forces? The consequences of Chinese modernization for C3 have also been worrisome to Washington. While the SAF was tasked to pursue “dual deterrence and dual operations,” i.e., wield both nuclear-and conventional-capable missiles, as early as in the mid-1980s, the modernization, diversification, and expansion of China’s conventional force has, as mentioned earlier, only begun to grow fast in recent years. Looking ahead, it is likely that the continued introduction of new dual-capable missiles, the increasing dispersal of land-mobile missiles, and the steady rise in the number of deployable nuclear weapons will, at the very least, complicate the C3 systems of China’s land-based nuclear delivery systems. What’s more, the emerging nuclear roles of the PLAN and PLAAF will add extra and probably major layers of complexity. The concern is that a human error or malfunction could increase instability or lead to inadvertent escalation. Many questions remain unanswered: Will C3 systems be modernized in a timely fashion, as nuclear modernization proceeds? Will the SAF be involved in PLAN and PLAAF nuclear missions? Will the PLAN and PLAAF develop nuclear-warhead management know-how and capability of their own? How do Beijing and the PLA intend to communicate with PLAN assets? Will they introduce pre-delegated authority to launch nuclear weapons?

# Advantage Answers

## Russia Deterrence

### No Russia War

#### No Russia war—Ukraine has recked them

Bergman 5/22- director of the Europe Program at the Center for Strategic and International Studies in Washington, D.C.,(Max Bergmann, “Russia’s Coming Great Power Struggle,” CSIS, May 12, 2022, https://www.csis.org/analysis/russias-coming-great-power-struggle)//mcu

On Monday, all eyes were on Red Square for the annual May 9 victory day celebration to see what Vladimir Putin would do. The answer was not much. Instead of mobilizing the country for total war against Ukraine or declaring some sort of Potemkin victory, Putin stayed the course. This is not because the current trajectory of Russia’s operation in Ukraine is working as planned. What has become apparent in the war in Ukraine, especially since Russia gave up its offensive against Kyiv, is that there is a gap between Russia’s grandiose geopolitical objectives and its capacity to deliver. In the case of Ukraine, escalating the conflict might turn the war in Putin’s favor, but mass mobilization would not guarantee success in the battlefield. It could also lead to intense public backlash, putting his regime at risk. Thus, the two defining obsessions of the Putin era—regime survival and Russia’s geopolitical might—are in tension. As sanctions take their toll and battlefield losses mount, the gap between Putin’s ambitions and Russia’s capacity is likely to grow. As a leader obsessed with geopolitics, Putin will inevitably engage in a desperate scramble to maintain Russia’s great power status, but he will find it incredibly difficult in the weeks, months, and years ahead to do so. The basic problem for Putin is that Western strategy to weaken Russia is working better than anyone could have expected. Secretary of Defense Lloyd Austin’s comment may have overstepped when he bluntly said, “We want to see Russia weakened.” But underlying Austin’s comments is a clear sense of confidence that the strategy is clearly working. The initial thrust of this strategy began on the economic front with sanctions. The original assumption behind sanctions was not that they would get Putin to end the war. Banks do not stop tanks, after all. But instead, by imposing significant medium- to long-term costs on Russia, such that in the next 1 year, 5 years, and 10 years, the Russian economy would be severely weakened, the Kremlin would be forced into a tough juggling act between guns (geopolitical ambition) or butter (domestic tranquility). What has surprised U.S. policymakers is the speed and intensity through which the U.S. and European public have demanded stronger actions. European outrage has led to a far stronger sanctions response than imagined possible before the war. Europe has demonstrated it is willing to bear substantial economic costs to weaken Russia and is now moving at an incredible pace to decouple from Russia, now targeting Russian oil. This is having a devastating impact on Russia’s economy. The Russian Central Bank survey reveals expectations of soaring inflation, economic contraction, and no growth. Furthermore, Russia is facing a massive brain drain as up to 200,000 Russians may have left the country by the second week of March alone. It has also suffered substantial damage to its burgeoning tech industry, as it lost access to some overseas markets and may lose up to 170,000 tech workers. The biggest surprise, however, is the performance of Ukraine on the battlefield, the ineptitude of Russia’s military, and the game-changing efficacy Western security assistance. Russia’s forces have suffered shocking losses. The Pentagon estimates that Russia has lost around 25 percent of the combat power it had used to invade Ukraine, with the UK defense minister claiming that Russia suffered losses of 15,000 in personnel and over 2,500 in large equipment. If the war ended tomorrow, Russia would have considerable costs to recapitalize its forces—build more tanks and Kalibr cruise missile systems, as well as train new personnel—not to mention seek to address the deficiencies exposed in the war. But the war is not going to end tomorrow, and the long-term costs to Russia will grow. Thus, Russia finds itself in a huge hole. But to make matters much worse for the Kremlin, the export controls—one of the most innovative aspects of the sanctions—is just starting to bite. The export controls are designed to restrict commercial exports to Russia of advanced technology. This raises major questions for the Kremlin. For instance, how will Russia be able to rebuild its military when it cannot buy semiconductors to build new Kalibr cruise missiles? When a Western component used to manufacture Russian tanks breaks, will Russia be able to get another? If not, can it build its own? According to the White House, two major plants that specialize in manufacturing and repair of tanks—Uralvagonzavod Corporation and the Chelyabinsk Tractor Plant—have suspended their work due to the lack of foreign components. There is no doubt that Russia will aggressively pursue work-arounds. Sanctions evasion will be a nonstop pursuit, aided by China, as well as other complicit countries. Russia will use “burner banks” that pop up to handle a transaction, get sanctioned, and go away. It will use shell companies, smugglers, and the criminal underworld to gain access to materials. It will, in short, act like North Korea. But while this type of smuggling can support a bespoke missile development operation, it is highly uncertain whether this will suffice to keep the Russian defense industrial sector humming. Nevertheless, even if Russia finds a way, acquiring items through the black market and through convoluted means will add substantial costs, **further depleting Russia’s economic coffers.** Russia will seek to turn to domestic production, pursuing classic import substitution, hoping domestic production will replace imported goods. This could work in some areas, but items like semiconductors cannot just be conjured out of thin air, especially when Russia’s knowledge workers have fled in droves. Even if Russia can replace imported parts domestically, this will still add costs and is unlikely to result in the same level of quality of imported goods. Whether export controls succeed in starving Russia of the technology and machinery necessary to rebuild its military is of **immense geopolitical importance.** Russia’s defense industrial prowess is key to its foreign policy and undergirds its relationships with countries across the globe. This is especially true for a country like India. India is dependent on the Russian arms industry and has $8 billion worth of outstanding military orders from Russia, and also needs a continuous supply of spare parts and components. Indian officials said they expect some short-term delays in the “S-400 Triumf missile systems, Grigorovich-class stealth frigates, and Kalashnikov AK 203-7.62x39mm assault rifles, as well as spares supplies for Kilo-class submarines, MiG-29 fighters, and Kamov Mi-17 military transport helicopters. . . . India today imports over 10,000 types of spares and line replacement units worth over $500 million annually from Russia.” Will Russia be able to meet its deliveries? If Russia can’t deliver, India will have to scramble, increasingly turning to U.S., European, and Asian partners for alternatives. But beyond India, Russia’s defense industrial troubles could severely impact its foreign policy with countries around the world. In Southeast Asia, Vietnam is reliant on Russia’s defense industry and could be further alienated by closer Sino-Russian relations. Furthermore, 50 percent of Africa’s defense industrial imports come from Russia. Thus, if sanctions and export restrictions work as expected, Putin will have to scramble to maintain Russia’s global standing. The most direct way for Putin to assert Russia’s strength and deter the West from taking advantage of a militarily weakened Russia, is nuclear saber rattling. **This is already evident in loose** **talk** from Russian officials, leading to understandable concerns about risks of nuclear escalation. Reviving such concerns in the West could be a boon to a Kremlin, as it might foster prestige-building Cold War-era nuclear talks or help constrain Western belligerence. Russia could also continue to look to asymmetric means to hit back and impose costs on the West. Cyberattacks, political influence and disinformation campaigns, money laundering and corruption efforts are few of the many tools in its toolbox. However, its effectiveness has eroded somewhat, as Russia has lost the element of surprise. The United States and Europe have obsessively studied Russia’s active measures campaigns since 2016. Russian disinformation campaigns on the war in Ukraine have had little impact on the West. Instead, it is the United States, with its aggressive disclosures of intelligence, and Ukraine, with Zelensky filming cell phone videos and posting Ukrainian battlefield successes on social media, that have been winning the information war. Russian political influencing efforts will also prove increasingly difficult. Putin-friendly politicians, from Marine Le Pen in France to Matteo Salvini in Italy, have sought to create their distance. Russia can still attempt at the margins to impact politics, corrupting politicians or secretly donating or funding political campaigns. But U.S. and European intelligence and law enforcement are focused on this threat. Additionally, the massive wealth and influence of Russian oligarchs, which has had a corrosive impact on their democratic hosts, has been aggressively uprooted. **Russia has thus lost one of its most important soft power tools**. The end result is that the West is both on guard and has built up a degree of resilience. Cyberattacks against the West are another potential option for Putin. There are significant concerns about the vulnerability of critical infrastructure in the United States to Russian cyberattacks. But attacks on critical infrastructure, such as the May 2021 Colonial Pipeline attack, allegedly by a nominally private Russian actors, also carry greater risks for the Kremlin now. While the Biden administration decided to prioritize summitry with Putin rather than responding in kind, a Russian cyberattack in this environment would likely be treated far differently, possibly resulting in a U.S. cyber response against Russian infrastructure or expanding direct involvement in Ukraine. A vulnerable Russia, with its hands full in eastern Ukraine, will likely be nervous about provoking an escalatory spiral.

#### Checks solve Russia escalation

Tsygankov 16—Professor at the Departments of Political Science and International Relations at San Francisco State University [Andrei, “5 reasons why the threat of a global war involving Russia is overstated,” *Russia Direct*, 19 Feb, http://www.russia-direct.org/opinion/5-reasons-why-threat-great-power-war-involving-russia-overstated]

First, whatever the rhetoric, major powers are not inclined towards risky behavior when their core interests are at stake. This concerns not only the nuclear superpowers, but also countries such as Turkey. The prospect of confronting Russia's overwhelmingly superior military should give pause even to someone as hot-tempered as Turkish President Tayyip Erdogan. Even if Erdogan wanted to pit Russia against NATO, it wouldn’t work. So far, NATO has been careful to not be drawn into highly provocative actions, whether it is by responding to Russia seizing the Pristina International Airport in June 1999, getting involved on Georgia’s side during the military conflict in August 2008 or by providing lethal military assistance and support for Ukraine. Unless Russia is the clear and proven aggressor, NATO is unlikely to support Turkey and begin World War III. Second, Russia remains a defensive power aware of its responsibility for maintaining international stability. Moscow wants to work with major powers, not against them. Its insistence on Western recognition of Russia’s interests must not be construed as a drive to destroy the foundations of the international order, such as sovereignty, multilateralism, and arms control. Third, the United States has important interests to prevent regional conflicts from escalating or becoming trans-regional. Although its relative military capabilities are not where they were ten years ago, the U.S. military and diplomatic resources are sufficient to restrain key regional players in any part of the world. Given the power rivalry across several regions, proxy wars are possible and indeed are happening, but they are unlikely to escalate. Fourth, unlike the Cold War era, the contemporary world has no rigid alliance structure. The so-called Russia-China-Iran axis is hardly more than a figment of the imagination by American neoconservatives and some Russia conspiracy-minded thinkers. The world remains a space in which international coalitions overlap and are mostly formed on an ad hoc basis. Fifth, with the exception of the Islamic State of Iraq and the Greater Syria (ISIS), there is no fundamental conflict of values and ideologies. Despite the efforts to present as incompatible the so-called “traditional” and “Western” values by Russia or “democracy” to “autocracy” by the United States and Europe, the world majority does not think that this cultural divide is worth fighting for. Despite the dangers of the world we live in, it contains a number of important, even underappreciated, checks on great powers’ militarism. The threat talk coming from politicians is often deceiving. Such talk may be a way to pressure the opponent into various political and military concessions rather than to signal real intentions. When such pressures do not bring expected results, the rhetoric of war and isolation subsides. Then a dialogue begins. Perhaps, the increasing frequency of exchanges between Obama and Putin since December 2015 - including their recent phone conversation following the Munich conference - suggest a growing recognition that the record of pressuring Russia has

#### No Russia war.

Galeotti, 18 **–** Mark Galeotti (Senior researcher at the Institute of International Relations Prague and head of its Centre for European Security; “Forget Britain’s nuclear deterrent – here’s what Russia is really afraid of”; <https://www.theguardian.com/commentisfree/2018/jan/19/nuclear-weapons-uk-defence-review-russia>; accessed 7/18/18)

Tanks are great for fighting other tanks, but there is little serious likelihood of a full-scale land war between Russia and NATO. For everything else, from flag-flying and humanitarian intervention, to heading off Crimea-style landgrabs, where what matters is getting to the battlefield when it counts, rather than too late, the special forces, Royal Marines and paras are hard to beat. These forces also suit post-Brexit geopolitics. They allow the UK to achieve its usual aim of “punching above its weight” and, blasphemy though it may be, make the French happy. On a recent trip to the French defence ministry, I repeatedly heard concerns that Brexit leaves France as the last EU country with the will and the forces to mount serious out-of-area operations. If we are still potential partners, that gives us credibility – and leverage. In a way, the Russians have a similar perspective on the Royal Navy. What bothers them is not our massive new aircraft carrier, which one naval officer said would make a great “missile magnet” in time of war. Rather, the concern is about smaller, lighter forces. Submarines that can contest the northern waters. Frigates able to both protect our coastlines and project power abroad. Simply having the number of ships to keep enough deployed at any one time. As the officer continued: “If your navy is essentially one carrier battle group, you can do one thing well, but nothing else.” Thirdly, it is not just specific forces and units that the Russians believe gives the UK its edge, but training and morale. Russian successes in Crimea and Syria partly represent an unfamiliar new emphasis on the human side of their military. Britain’s problems of having to scrimp on training and overstretch its forces have not gone unnoticed. One Russian noted that “these days, the Europeans have armies but no soldiers, while the British have always had soldiers” – he actually used the word boets, which really means something closer to “warriors” – “so why would they want to lose that?” Why indeed? Of course there are many other facets essential to the UK’s defence capability. What doesn’t seem to worry the Russians? Not once have I heard any taking our “independent nuclear deterrent” seriously. For all kinds of reasons, this is currently not under serious debate – though taking its cost out of the defence budget would make a massive difference – but let us not pretend it is because Moscow thinks it matters.

### No Russia Threat---1NC

#### Russia is a failed state and not a threat – resources, tech challenges, and diplomatic failure.

Rumer et al. 21 — Eugene, Former national intelligence officer for Russia and Eurasia at the U.S. National Intelligence Council, is a senior fellow and the director of Carnegie’s Russia and Eurasia Program, Richard Sokolsky, Nonresident senior fellow in Carnegie’s Russia and Eurasia Program. Paul Stronski, Senior fellow in Carnegie’s Russia and Eurasia Program, 3-29-2021, "Russia in the Arctic—A Critical Examination," Carnegie Endowment for International Peace, https://carnegieendowment.org/2021/03/29/russia-in-arctic-critical-examination-pub-84181, accessed 7-5-2022 //THS—OLW

MANAGING THE COMPETITION

It can be difficult to see past Russia’s rhetoric, deliberately provocative acts, and grandiose statements about its Arctic plans and threats to them, and to acknowledge that its bark so far has been worse than its bite. Russia’s ambitions far exceed the resources it has to realize them. Thus, while it is essential not to yield to Russia’s posturing, it is equally important not to overreact to it.

Notwithstanding the seeming novelty of the situation—changing climate, NATO’s new frontier in Eastern Europe, China’s growing footprint in the Arctic, and so on—Russia’s drive to the Far North and the rationale behind it are part of a long-standing historical pattern. Its confrontation with the West is not a new development either, and the push for Arctic resources is crucial for its ability to sustain this posture. From the perspective of the country’s security establishment, Russia is playing defense rather than offense.

Moreover, Russia is confronting the West in vastly diminished circumstances. Its economy is stagnant, its population is declining, and it is diplomatically isolated in Europe and among the Arctic states—almost entirely thanks to its own actions. It has rebuilt its military capabilities after a long period of neglect and decline, but even this utmost national priority is facing budget constraints and technological challenges. In the years to come Russia’s Arctic pursuits and posture will likely be driven by concerns about being able to sustain its already weakened position vis-à-vis the West.

### Not Revisionist --- 2NC

#### Russia doesn’t have the capabilities to be revisionist

**Kamp 20** [Karl-Heinz Kamp was President of the Federal Academy for Security Policy (BAKS), Berlin, when he authored this text, “NATO’s coming existential challenge”, JSTOR]

At the same time, there is a broad perception among US political elites of Russia being a power in decline. The country missed decades of political, economic and societal modernization and seems already now unable to live up to its self-image as a major international player. Russia has a significantly smaller GDP than Italy, has only two competitive products on the world market (energy and weapons), while maintaining political and economic structures based on rent income and corruption instead of innovation and rule of law. The Russian armed forces might be able to attack or bully smaller neighbours, but they are hardly capable of taking decisive action on a global scale – and the situation is likely to further deteriorate as the reduction of the Russian defence budget for 2018 indicated. With its still relevant military capabilities, a huge nuclear arsenal and a permanent seat in the UN Security Council, Russia will certainly always have a “nuisance capability” for the United States. However, it will be less and less able to shape international politics on a decisive scale. This does not imply that a declining Russia will be easier to handle, as it might partly disintegrate and tempt the leadership to take irrational decisions. Nevertheless, its overall power to pursue what it considers Russian interests will profoundly decline.

### No Escalation---1NC

#### No escalation – their authors are cold war sensationalists.

Burke 18 — Danita Catherine, Marie Skłodowska-Curie Individual Fellow, Centre for War Studies, University of Southern Denmark, 12-13-2018, "Why the new Arctic 'Cold War' is a dangerous myth," Conversation, https://theconversation.com/why-the-new-arctic-cold-war-is-a-dangerous-myth-108274, accessed 7-5-2022 //THS—OLW

All too often the Arctic region is [portrayed](https://www.bbc.co.uk/news/av/newsbeat-45193481/could-the-arctic-be-where-the-next-cold-war-happens) as an area [on the cusp](https://theconversation.com/arctic-cold-war-climate-change-has-ignited-a-new-polar-power-struggle-107329) of [military crisis](http://time.com/4773238/russia-cold-war-united-states-artic-donald-trump-barack-obama-vladimir-putin/). This is an easy narrative to sell; it harks back to the Cold War. [Potent imagery persists](https://www.nationalgeographic.co.uk/environment-and-conservation/2018/10/scenes-new-cold-war-unfolding-top-world) of submarines trolling silently beneath the Arctic ice and nuclear ballistic missiles pointed across the North Pole.

During the height of the standoff between NATO and the USSR, the world feared a barrage of nuclear warheads streaming in from the frozen north – and this experience has imprinted on the collective imagination and created distinct ideas about the region. This fear, for example, motivated from the 1950s the construction of the [Distant Early Warning (DEW) Lines](https://www.ubcpress.ca/lock-stock-and-icebergs), a system of radar stations across the northern US (Alaska), Canada, and Greenland. The DEW Lines were meant to give the US and its NATO allies an early warning of an incoming Soviet nuclear strike.

The Cold War was a significant period in history. But catchy headlines playing off the parallels between the region and a new “cold” war are misleading. There have, of course, been increased tensions between the West and Russia since 2014 due to the conflict over Ukraine and Crimea. The 2018 [Trident Juncture](https://www.nato.int/cps/en/natohq/news_158620.htm) exercises in the Arctic, featuring “50,000 personnel from NATO Allies and partner countries”, are evidence of this. But the tension is not Arctic-specific and militaries are diverse actors in the region. This nuance, however, is often overlooked.

Current military exercises and equipment acquisitions fuel [old Cold War perceptions](https://thebarentsobserver.com/en/security/2018/11/first-division-new-missile-system-ready-arctic#.W_6ezBEvu8Y.twitter). And a certain militarization is indeed occurring in the Arctic. Russia, for example, has recently invested heavily in updating its northern [military infrastructure](https://www.amazon.com/Russias-Arctic-Strategies-Future-North/dp/0765635011). So too have other Arctic states, such as [Canada](http://www.forces.gc.ca/en/business-equipment/arctic-offshore-patrol-ships.page) and [Denmark](https://www.reuters.com/article/us-denmark-china-greenland-base/denmark-spurned-chinese-offer-for-greenland-base-over-security-sources-idUSKBN1782EE). But military activity has, to varying degrees, occurred for decades in the north – it was just largely ignored by those not living there until recently.

What’s changed?

The Arctic states guard their land and waterways through aerial, submarine and surface ship patrols, much as they have done for years. This hardly constitutes an escalation of military tensions, even if the infrastructure is being updated and, in some cases, increased. Despite this, talk of a new Cold War [is heating up](https://t.co/9rzEK9Z64e).

A nation’s armed forces often play a range of roles – beyond their traditional responsibilities in armed conflict. They are useful for rapid response during disasters, for example, and provide a range of security roles that don’t necessarily mean an escalation to war. They offer search and rescue (SAR) services and policing support.

In Norway, for example, the coastguard is one of the branches of the navy, along with the armed fleet, the naval schools [and the naval bases](https://forsvaret.no/en/organisation/navy). In Denmark, meanwhile, the coastguard’s Arctic activities are managed by the [Royal Danish Navy](https://www2.forsvaret.dk/eng/organisation/navy/pages/navy.aspx).

In Canada, the coastguard is a civilian organization. It “is the principal civilian maritime operational arm of the [government of Canada](http://www.ccg-gcc.gc.ca/eng/CCG/SAR_Maritime_Sar)”. But it also works closely with the Department of National Defense to provide Canada’s [search and rescue services](https://www.academia.edu/12797020/Symbolism_and_Militarism_of_Canada_s_North_Book_Chapter_), including [aerial support](http://www.ccg-gcc.gc.ca/eng/CCG/SAR_Maritime_Sar).

The US coastguard is part of the [Department of Homeland Security](https://www.usni.org/magazines/proceedings/2017-02/shift-coast-guard-dod), which “secures the nation’s air, land, and sea borders to prevent illegal activity while facilitating [lawful travel and trade](https://www.dhs.gov/secure-and-manage-borders)”. By law, however, the US coastguard is outside the Department of Defense “in peacetime and is poised for transfer to the Department of the Navy [during war](https://www.usni.org/magazines/proceedings/2017-02/shift-coast-guard-dod)”.

Because of affiliations such as these, the line between military and civilian activity can become blurred. But that doesn’t mean all military activity is hostile or equates to an escalation towards war.

Changing environment

Climate change and technological advances have begun to open up the Arctic. And this means that more policing is required in a region that is remote and often out of reach for traditional police forces.

Other issues are also arising from climate change, such as increased forest fires. In July 2018, Sweden suffered major forest fires. As part of its effort to combat the fires it deployed [“laser-guided bombs to douse forest fires”](https://www.news.com.au/technology/innovation/military/sweden-deploys-laserguided-bombs-to-douse-forest-fires/news-story/1cf1fe478b64ffd118aafe5d1cdd56a0). This initiative was led by the Swedish air force. By using laser bombs, the “shockwaves simply blew out the flames in the same way our breath does to candles”.

As the region’s economic activity expands, armed forces are also being asked to assist more with civilian issues. In 2017, for example, the Norwegian coastguard was called in by local police in Tromsø to [help police Greenpeace protesters](http://www.rcinet.ca/eye-on-the-arctic/2017/08/18/greenpeace-vessel-towed-protesters-arrested-norwegian-arctic-waters/) who had entered a 500-metre safety zone around the Songa Enabler rig in an effort to stop drilling in the Korpfjell field of the Barents Sea. The Norwegian coastguard vessel, KV Nordkapp, responded, resulting in the seizure of Greenpeace’s Arctic Sunrise ship and the arrest of all 35 people on board.

Given the Arctic’s growing economic potential, military infrastructure is getting [more attention](https://geohistory.today/russia-arctic-development-power/). Russia, in particular, has made it clear that with economic potential on the line in the Arctic, a [military buildup is essential](https://www.thearcticinstitute.org/russias-arctic-military-and-security-part-two/). For Russia, Arctic resources are central to the country’s economic security so the [government line](https://www.thearcticinstitute.org/russias-arctic-military-and-security-part-two/) is: “National security in the Arctic requires an advanced naval, air force and army presence.” But issues of national security are wide ranging and are not solely a matter of building capacity to defend oneself from or in war.

Overall, it is vital to remember that while militaries are tools of war, they are not just tools of war. They also contribute to and provide a wide range of security services. This does not mean that increased military spending and activities should not be viewed with a critical eye. Indeed, they should. But discussing “a new Cold War” is sensationalist. It detracts from the broader roles that militaries play throughout the Arctic and stokes the very tensions it warns of.

## Arctic War Answers

### Turn---Adventurism Bad

#### Arctic adventurism is bad – collapses Russian trust and causes force-on-force friction

Ritter 20 — Scott, Former US Marine Corps intelligence officer. He served in the Soviet Union as an inspector implementing the INF Treaty, in General Schwarzkopf’s staff during the Gulf War, and from 1991-1998 as a UN weapons inspector, 05-14-2020, "US muscle-flexing threatens to open Arctic front in new Cold War with Russia," RT International, https://www.rt.com/op-ed/488679-arctic-military-russia-us/, accessed 7-1-2022 //THS—OLW

The US Navy is on the cusp of conducting confrontational freedom of navigation operations in the Arctic that threaten Russian economic and national security interests.

The recent resumption by the US Navy of a[Barents Sea Patrol](https://www.defensenews.com/naval/2020/05/11/the-us-navy-returns-to-an-increasingly-militarized-arctic/) represents muscle-flexing on the part of Washington and its NATO allies unseen since the end of the Cold War.

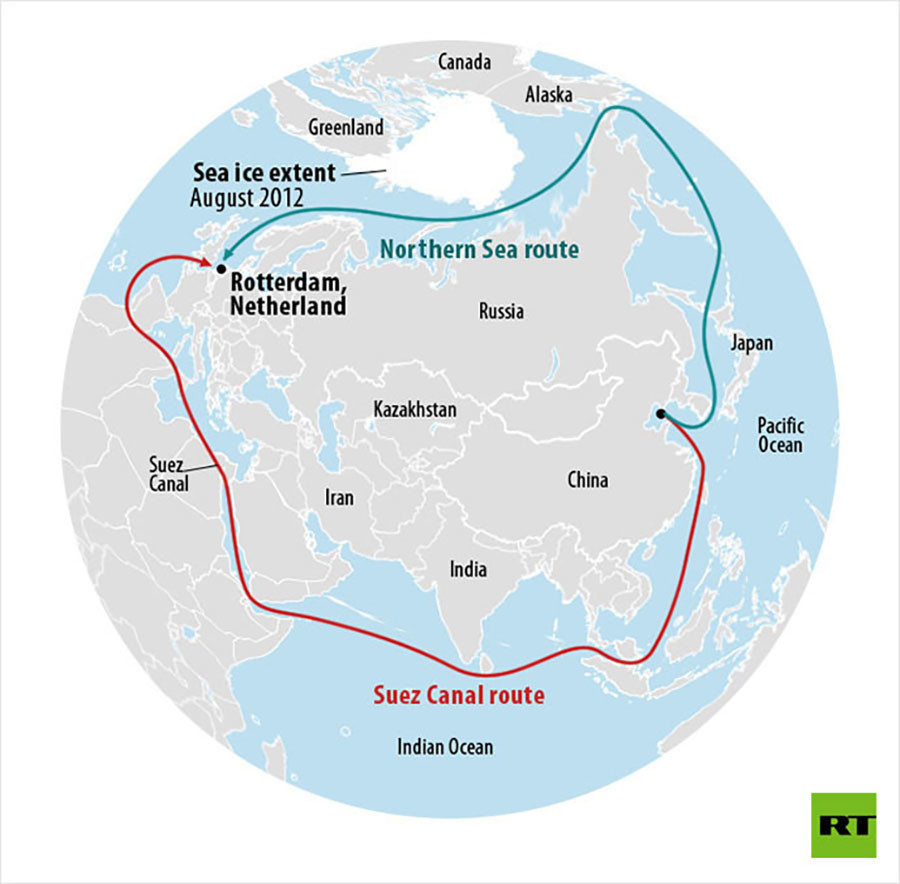
Three American destroyers and a British frigate, accompanied by a supply ship, ventured into the Arctic body of water last week. The reestablishment of the patrol is part of a larger refocusing of attention by the US and NATO on the Arctic, where warming waters and melting ice have created the possibility of faster sea transits between Europe and Asia and access to natural resources which were previously viewed as cost-prohibitive due to heavy ice conditions.

Russia, which views most of the Barents Sea as part of its territorial waters, has made it clear to the US and the international community that it will protect its core national economic and security interests using all means available. Given the stakes involved, the potential for conflict is real should the US seek to expand its military posture more aggressively in the Arctic.

This is precisely what some in the US defense establishment are arguing for. In order to prevent what American defense hawks have called a potential maritime “Iron Curtain” from being pulled down over the Arctic by Russia, calls are being made for a more aggressive US naval posture in the region, expanding the Barents Sea Patrol to incorporate so-called Freedom of Navigation Operations (FONOPs) as standard practice for US and NATO naval operations in the Arctic north.

The US has regularly asserted its right to navigate international waters consistent with the United Nations Convention on the Law of the Sea (UNCLOS), despite not having signed the agreement (the US sidesteps this inconvenient fact by viewing the provisions of UNCLOS it finds acceptable to operate as common law.) Since 1983, the US Navy has conducted more than 400 FONOPs designed to challenge what it views as excessive maritime claims. The proponents of expanded FONOPs in the Arctic view such exercises as a prerequisite for countering perceived Russian domination of the Arctic region.

One of the guiding principles of any US/NATO FONOPs conducted in the Arctic Sea will be to push back on what these nations view as excessively restrictive Russian national legislation based on[UNCLOS’ Article 234](https://sites.tufts.edu/lawofthesea/chapter-eight/)governing operations in Arctic waters. As things currently stand, Russia views the Northeast Passage (called the Northern Sea Route in Russia) as being exclusively within Russian territorial waters, and as such traditional freedom of navigation rights do not apply. Instead, Russia has implemented a series of laws which, by placing restrictions on building construction, ship navigation [capabilities](https://www.rt.com/russia/445245-new-rules-russia-arctic/), and permit requirements, all but precludes freedom of navigation. It should be noted that Russian laws mirror in many respects those of Canada, which – like Russia – uses Article 234 as the basis of its restrictive domestic legislation governing the transit of ships in its territorial Arctic waters.



Russian and Canadian interpretation of the rights afforded them under Article 234 are coming under legal challenge by nations such as the US, which want access to the economic potential of the Arctic which are emerging as the ice sheet is pushed back by the effects of global warming.

Protecting Russian vested interests in the economic benefits that can be accrued (President Vladimir Putin has[assessed the value](https://apnews.com/8df6e2753db245b0ba887d20b6fcf340) of the mineral deposits in Russia’s Arctic region as approximately $30 trillion) by exploiting the reduced ice exposure of the Arctic region are a major reason behind Russia’s forward-leaning posture in the region.

But there is another critical factor at play, which changes the dynamics of any FONOP-type operation. “Innocent passage” is a critical concept behind any viable FONOP exercise—military vessels must be engaged in non-hostile transit activity. However, US and NATO vessels that would conduct future FONOPs in the Arctic Sea are armed with Aegis surface-to-air missiles and sea-launched cruise missiles that would threaten Russian strategic rocket forces stationed in Siberia.

The US is in the process of developing advanced[SM-3 Block IIA](https://www.navalnews.com/naval-news/2020/02/sm-3-block-iia-set-for-first-ever-icbm-intercept-test/) surface-to-air missiles which can be launched from the[Mark 41 Vertical Launch System](http://www.seaforces.org/wpnsys/SURFACE/Mk-41-missile-launcher.htm) (VLS) employed on Aegis-capable ships. These new interceptors are capable of intercepting intercontinental ballistic missiles (ICBMs) and will be tested in this configuration in the third quarter of 2020. Given the fact that the vast majority of Russia’s strategic nuclear force—especially those elements of which are stationed in Siberia—are configured to fly over the Arctic Sea region before reaching their targets in the United States, any US naval deployment in the Arctic Sea armed with these weapons could not be seen as innocent.

The Mark 41 VLS is also configured to launch sea-launched cruise missiles (SLCMs). As part of the 2018 Nuclear Posture Review, the US Navy is developing a new nuclear capable SLCM, known as the SLCM-N, which will be armed with a W-80-4 thermonuclear warhead with a variable yield of 5-150 kilotons. Any ship armed with SLCM-N weapons that is operating in the Arctic Sea region will possess an inherent first-strike interdiction capability against Russia’s strategic nuclear forces—again, a capability which makes the transit of such vessels anything but innocent.

Russia currently has six military bases in the north, along with 10 airfields, numerous anti-aircraft missile system positions and military ports operating under the umbrella of the Northern Fleet Joint Strategic Command, better known simply as the Arctic forces. The anti-aircraft defenses include the Tor-M2DT, a modernized variant of the Soviet-era SA-15 system, and the newer Pantsir-SA system, both of which have been adapted to operating in the harsh environment of the Arctic north. These systems are designed to defend against cruise missile attacks, and are on 24-hour alert, 365 days per year.

Seen in this light, the Russian militarization of the Arctic is more defensive than offensive and intended to protect the vital national security interests of Moscow from threats such as those that would be presented through any aggressive US/NATO FONOPs in the Arctic Sea.

Moreover, Russia has a history, dating back to Soviet times, of aggressively defending its national security interests from what it believes to be the encroachment on its territorial waters by FONOPs which violate the requirement of innocent passage. Perhaps the most relevant example of this is found in the ramming incident that transpired off the coast of the Crimean Peninsula on February 12, 1988. The US Navy had dispatched a two-ship task force, consisting of the cruiser USS Yorktown and the destroyer USS Caron, to conduct FONOPs outside of traditional sea lanes.

The US claimed it had every right to operate outside these sea lanes, citing innocent passage. The Soviets, however, viewed the presence of two modern warships, more heavily armed than any previous FONOP exercise, as anything but innocent, and dispatched two frigates to challenge the US naval presence. After warning both the Yorktown and Caron to depart, and having these warnings ignored, the Soviet ships proceeded to ram the US navy ships to compel their departure. There can be little doubt that the Russian navy would employ similar tactics—or more—to protect its interests in the Arctic Sea it felt threatened by US/NATO FONOPs that did not meet the criterion of innocent passage.

If the US decides to beef up its naval presence in the Arctic region, expanding the current Barents Sea Patrol to incorporate more aggressive FONOPs along Russia’s Northern Sea Route, one can anticipate that Russia will respond in kind, creating the potential for a repeat of the Yorktown/Caron incident in the frigid waters of the Arctic north. In this day and age of renewed Cold War-like tensions between the US/NATO and Russia, the last thing either side needs is a new point of potential force-on-force friction.

### No Arctic War---1NC

#### No Arctic war – their authors are hype.

Murray 16 — Robert, Vice-President of Research at the Frontier Centre for Public Policy and an Adjunct Professor at the University of Alberta ,5-16-2016, "Do Not Oversell the Russian Threat in the Arctic," War on the Rocks, https://warontherocks.com/2016/05/do-not-oversell-the-russian-threat-in-the-arctic/, accessed 7-3-2022 //THS—OLW

When doing a cursory search of articles and commentaries about the current state of Arctic international relations, you would be forgiven if you were to think the Russians are preparing to launch a massive offensive against other Arctic states, particularly Canada. The oft-repeated narrative surrounding the Arctic is that the Russians are building up their northern military capabilities as part of their neo-imperial ambitions and to turn the Arctic into a sphere of geopolitical competition, tension, and conflict. There is reason for this narrative to not only survive, but to grow in its sensationalism. Russia’s provocativeness, actions, and statements from Russian officials do little to allay fears. For scholars of foreign and defense policy, as well as casual observers, a potential conflict with the Russians in the Arctic would be of great interest. For media outlets, the idea of conflict in the Arctic continues to serve as click-bait, and so the sensationalism continues. The problem, however, is that very little of this narrative is grounded in reality. The Arctic has certainly emerged as an arena of vast interest in recent years, and rightfully so. Northern climates continue to change and there are greater opportunities for access, as well as the possibility of resource wealth. As such, more attention has been paid to affairs in the circumpolar region. Covering approximately 4 percent of the Earth’s surface at 20,000,000 square kilometers with an estimated 4 million people, the Arctic is far more complex than a simple calculation about Russia’s investments in military technology. Arctic international relations are based on interstate cooperation, indigenous engagement, scientific and environmental collaboration, and is seeing an emerging global governance architecture through bodies like the Arctic Council designed to provide a forum for future cooperation, resource sharing and to ensure diplomacy, rather than conflict. This continues to be the predominant norm. Despite the existing cooperative dynamics in the Arctic, there are reasons for concern and important historical lessons to bear in mind. The Arctic is not immune from geopolitics and other international political events, and it is still very much impacted by the international system’s anarchic structure and great power politics. Circumpolar relations involve multiple actors, including the eight Arctic states, Arctic-interested states, international institutions, indigenous groups, and NGOs. All are contributing to an increasingly complex Arctic political landscape. This complexity is leading to concerns over states’ intentions in the region, and how other states and institutions react. Russia has been generating the most attention for its recent Arctic behavior, primarily due to the ongoing militarization of its Arctic territory and fears about whether Russia’s actions in Crimea, eastern Ukraine, and Syria might somehow foreshadow aggression in the north. Given the fact that Russia’s Arctic policy has included an expansion of permanent military forces, new military bases, new air force divisions, new military technologies, and massive military exercises, it is understandable that other Arctic states would be paying close attention to Russia’s Arctic moves. However, the “Arctic conflict” narrative assumes that Russia wants to be an aggressor in the region. This line of thinking existed before Russia’s annexation of Crimea and its incursions into eastern Ukraine, but those events have sparked more debate about whether Russia’s international behavior is inherently aggressive and whether Russia might use the Arctic as another theater in a new Cold War. The Arctic is not immune to the rules of the international system and great power politics. It is thus highly unlikely that Russia would risk conflict with the United States and other NATO states in the Arctic. There is little to gain by doing so and conflict would disrupt the emerging balance of power in the Arctic. If Russia was to initiate conflict in the circumpolar region, it would unilaterally disrupt the existing cooperative framework

### No Arctic War---2NC

#### Arctic war is unlikely – harsh conditions and new systems are less aggressive.

Schaller 16 — Benjamin, PhD, research fellow at the Centre for Peace Studies, Arctic University of Norway @ Tromsø, 3-9-2016, "Deconstructing the Narrative of Arctic War," World Policy, <https://worldpolicy.org/2016/03/09/deconstructing-the-narrative-of-arctic-war/>, accessed 7-3-2022 //THS—OLW

Natural Resources, Territorial Claims, and Militarization? First, what would be the source of a potential Arctic conflict? For many observers this seems to be very clear: economic interest. In 2008, a U.S. Geological Survey considered the Arctic to contain most of the world’s still undeveloped oil and gas. In addition, as the ice melts, lucrative shipping routes, like the Northwest Passage and the Northern Sea Route, are becoming more and more accessible. Since then, nearly every national submission to the extension of the Arctic state’s continental shelf (and thus the right to exploit the resources in the seabed) is considered a “provocative,” sometimes even “offensive” act. This entirely disregards the actual nature of this process, which is nothing more than a filing of scientific findings to a scientific body, the U.N. Commission on the Limits of the Continental Shelf. The commission will assess the findings and make recommendations, but lacks a mandate to resolve possible overlapping claims. However, the Arctic has a long history of resolving such disputes peacefully and in line with international law, such as in 2011 between Norway and Russia. There is also little reason why this should change in the near future. Hans Island, a “rock” in the Nares Strait between Canada and Greenland, became sort of a symbol for territorial disputes in the Arctic, as militaries from both states started to leave each other bottles of Danish schnapps or Canadian Club whiskey as well as welcome signs. Then, in August 2015, Russia indicated its willingness to negotiate its overlapping claims with Denmark in regards to the North Pole. Other remaining overlapping claims also carry little potential for military escalation. Second, what would war in the Arctic actually look like? It is probably not too surprising that the military presence in the Arctic is comparably low, considering that the Arctic is covered mainly by a large ocean and temperatures in winter can drop below -40 degrees Celsius. Historically, the High North continuously played an important geostrategic role, hosting, for example, Russia’s strategic nuclear missiles and air defense systems as well as serving as a “natural habitat” for strategic missile submarines. However, the harsh climate poses severe challenges to people and equipment, making a military presence in the Arctic very costly and often primarily symbolic. Denmark’s “Slædepatruljen SIRIUS,” an elite Danish navy unit, is a good illustration of this. The 14 soldiers of the unit split up in teams of two, patrolling 9942 miles of northeastern Greenland on dogsleds. Because very low temperatures make rifles operating with gas much less reliable, the soldiers are equipped with the M1917 Enfield, a rifle used during the first World War. Its main purpose is less military, but rather to protect them from straying polar bears. As former Canadian Chief of Defense Staff General Natynczyk put it: “If someone were to invade the Canadian Arctic, my first task would be to rescue them.” This leads directly to the last question: who would this “someone” be? Most recently, after Russia’s illegal annexation of Crimea and the subsequent significant freeze in NATO-Russia relations, many seem to argue at least for one side of a military conflict in the Arctic. Russia’s military modernization program, the reopening of military infrastructure, changes in its maritime doctrine, and strong statements by high-level officials, such as by Deputy Prime Minister Rogozin or Defense Minister Shoigu, to feed suspicion about Russia’s ambitions in the Arctic. At the same time, it is advisable to take a sober second look at what is actually happening on the ground. As for most of the Arctic coastal states, the thawing ice and expected increase in shipping call for additional search and rescue capabilities and makes Russia’s northern border more vulnerable to security challenges such as piracy, terrorism, and trafficking. With this in mind, new air defense systems, radar sites, airfields, border infrastructure, icebreakers, and patrol vessels are less an issue of aggressive military power projection. At the same time, Russia recently carried out several large-scale and unannounced military exercises, some also involving its troops in the Arctic. It would nevertheless be wrong to directly link these exercises to Russia’s regional ambitions rather than to a general shift in its policy towards the West and, in particular, towards NATO. Even if one rejects the history of close cooperation in the Arctic, a similar shift in Russian policy towards confrontation in the High North seems very unlikely. The main reason for such a conclusion is that only through playing by the rules will Russia be entitled to the largest share of the unexploited resources in the Arctic—more than it will be able to exploit in the next 100 years. Even more so, Russia will need to cooperate since the harsh Arctic climate makes search and rescue, oil and gas production, and border security, particularly risky, technologically challenging, and consequently very expensive tasks. Any announcement of unilateral action must thus be met with an appropriate amount of skepticism.

### Arctic Goals = Economic---1NC

#### Russia’s goals in the Arctic are purely economic – they only become violent if we force their hand.

Rumer et al. 21 — Eugene, Former national intelligence officer for Russia and Eurasia at the U.S. National Intelligence Council, is a senior fellow and the director of Carnegie’s Russia and Eurasia Program, Richard Sokolsky, Nonresident senior fellow in Carnegie’s Russia and Eurasia Program. Paul Stronski, Senior fellow in Carnegie’s Russia and Eurasia Program, 3-29-2021, "Russia in the Arctic—A Critical Examination," Carnegie Endowment for International Peace, https://carnegieendowment.org/2021/03/29/russia-in-arctic-critical-examination-pub-84181, accessed 7-5-2022 //THS—OLW

ECONOMICS AND ENERGY

Russia’s sparsely populated Arctic territories account for 10 percent of the country’s gross domestic product [GDP] and roughly 20 percent of its exports. Hydrocarbons comprise the major share, but these also include nonferrous and precious metals, stones, and other raw materials.11 About one-third of all fish harvested in Russia comes from Arctic waters, making it a key food source. The Russian government hopes to increase that share by 2030, as warming ocean water pushes fish stocks northward.12

Tapping these resources is Russia’s primary economic interest, but doing so will require developing costly and complicated road, rail, aviation, and maritime transportation infrastructure to connect the Arctic to other parts of the country and beyond. It will also require expanding icebreaking capabilities and developing ports, weather stations, and emergency response facilities. Building this infrastructure is Moscow’s second economic priority in the region.

Finally, Russia aspires to transform its northern coast into the Northern Sea Route, a navigable maritime corridor through Arctic waters. Currently passable without icebreaker escort only in the summer months, the corridor is used mainly by Russian vessels to transport Arctic resources to markets in Asia. Russia’s 2020 Arctic strategy, however, envisions transforming it into a competitive Asia-Europe maritime corridor by 2035.13

## Cables Answers

### 1NC – AT: Cables

#### Squo solves cable attacks

David 22 – Rona has been a journalist for over 20 years, collaborating with various media trusts: Pro Tv, Prima Tv, RFI, Cotidianul (…). Notable is also her experience within the Environment Commission of the Romanian Senate, as an advisor to the Chairman of this commission. In the period 2008-2010 she was a correspondent for Prima TV at the European Parliament in Strasbourg, which allowed her a European approach to media issues. (Rona Rita David, "Submarine Cables: Risks and Security Threats," Energy Industry Review, 3-25-2022, https://energyindustryreview.com/analysis/submarine-cables-risks-and-security-threats/, Accessed 7-5-2022, LASA-SC)

The US executive has recently investigated possible risks in the event of multiple attacks. In addition to expanding the SSGP grant program, it has encouraged the Maritime Administration to involve various civil society associations, such as the International Propeller Club, in programs designed to minimize these threats. The idea is to create a kind of “submarine cable militia” capable of responding quickly in a crisis.

The Propeller Club has more than 6,000 members and has recently provided $ 3.5 billion in aid to the maritime industry in the fight against Covid-19. Similarly, the creation of a “submarine cable Airbus” capable of competing with GAFAMs, whose market share could increase from 5% to 90% in six years, can obviously become a reality only if Europe pays attention to this topic.

In a context of growing international tensions, the creation of a European program modelled on the US and Japanese programs, which aims to increase operations to deter attacks on these infrastructures and to develop a high-stakes construction and repair, has become very important.

### A/C --- 1NC

#### Cyberattack alt cause – they can’t solve

David 22 – Rona has been a journalist for over 20 years, collaborating with various media trusts: Pro Tv, Prima Tv, RFI, Cotidianul (…). Notable is also her experience within the Environment Commission of the Romanian Senate, as an advisor to the Chairman of this commission. In the period 2008-2010 she was a correspondent for Prima TV at the European Parliament in Strasbourg, which allowed her a European approach to media issues. (Rona Rita David, "Submarine Cables: Risks and Security Threats," Energy Industry Review, 3-25-2022, https://energyindustryreview.com/analysis/submarine-cables-risks-and-security-threats/, Accessed 7-5-2022, LASA-SC)

The most vulnerable point of submarine cables, however, is where they reach land: the landing stations Thus, the town of Lège-Cap-Ferret, where the interface room between the Franco-American cable “Amitié” will be built, has recently become a veritable nest of spies, according to informed sources.

But the most worrying trend is that more and more cable operators are using remote management systems for their networks. Cable owners are excited about the staff cost savings. However, these systems have poor security, which exposes submarine cables to cyber security risks.

### No Attack --- 1NC

#### No attack impact – incentive and backups

Boykin 19 – Nick Boykin is the News Marketing Producer at WUSA 9. ("How vulnerable are the undersea cables that power the global internet?" WTKR, 7-26-2019, https://www.wtkr.com/2019/07/26/how-vulnerable-are-the-undersea-cables-that-power-the-global-internet, Accessed 7-5-2022, LASA-SC)

However, with more than 50 cables connected to the UK alone, Clatterbuck was skeptical about how useful a deliberate outage could be in a time of war, pointing to the level of coordination and resources required to cut multiple cables at once.

“If you wanted to sabotage the global internet or cut off a particular place you’d have to do it simultaneously on multiple cables,” he said. “You’d be focusing on the hardest aspect of disrupting a network.”

It would likely be easier to target onshore internet infrastructure with cyber and DDoS attacks, flooding the network and knocking key facilities offline. Though even then, Clatterbuck pointed out, military and other government organizations likely have satellite backups.

#### Risk is hype – they break all the time and Egypt thumps

Starosielski 15 – Nicole Starosielski is from the New York University. (Nicole Starosielski, "Are the Internet's Undersea Cables at Risk for Sabotage?," livescience, 11-4-2015, https://www.livescience.com/52685-are-the-internets-undersea-cables-at-risk-for-sabotage.html, Accessed 7-5-2022, LASA-SC)

The biggest problem with cable systems is not technological – it’s human. Because they run underground, underwater and between telephone poles, cable systems populate the same spaces we do. As a result, we accidentally break them all the time. Local construction projects dig up terrestrial lines. Boaters drop anchors on cables. And submarines can pinpoint systems under the sea.

Most of the recent media coverage has been dominated by the question of vulnerability. Are global communications networks really at risk of disruption? What would happen if these cables were cut? Do we need to worry about the threat of sabotage from Russian subs or terrorist agents?

The answer to this is not black and white. Any individual cable is always at risk, but likely far more so from boaters and fishermen than any saboteur. Over history, the single largest cause of disruption has been people unintentionally dropping anchors and nets. The International Cable Protection Committee has been working for years to prevent such breaks.

As a result, cables today are covered in steel armor and buried beneath the seafloor at their shore-ends, where the human threat is most concentrated. This provides some level of protection. In the deep sea, the ocean’s inaccessibility largely safeguards cables – they need only to be covered with a thin polyethelene sheath. It’s not that it’s much more difficult to sever cables in the deep ocean, it’s just that the primary forms of interference are less likely to happen. The sea is so big and the cables are so narrow, the probability isn’t that high that you’d run across one.

Sabotage has actually been rare in the history of undersea cables. There are certainly occurrences (though none recently), but these are disproportionately publicized. The World War I German raid of the Fanning Island cable station in the Pacific Ocean gets a lot of attention. And there was speculation about sabotage in the cable disruptions outside Alexandria, Egypt in 2008, which cut 70% of the country’s internet, affecting millions. Yet we hear little about the regular faults that occur, on average, about 200 times each year.

### Aff Fails --- 1NC

#### Aff fails – they would just move farther into the ocean – military might can’t prevent attacks.

Barker 18 – Lieutenant Commander Peter Barker is a serving Royal Navy officer and barrister. He is currently the Associate Director for the Law of Coalition Warfare at the Stockton Center for the Study of International Law. (Peter, "Undersea Cables and the Challenges of Protecting Seabed Lines of Communication," CIMSEC, 3-15-2018, https://cimsec.org/undersea-cables-challenges-protecting-seabed-lines-communication/, Accessed 7-5-2022, LASA-SC)

Clearly, a protection strategy for undersea cables cannot depend solely on military action. It is impossible to protect the entire cable network given its global expanse. The geographic area requiring protection is simply too large, even for the most powerful of navies. The natural consequence of this conclusion is to focus on identifying and intercepting ships and submarines capable of interfering with the cable network. However, the practicalities of this option are not promising. The technology required to tamper with cables is not overly sophisticated. It can be hosted in a wide range of vessels and easily transferred between them. Submarines present additional challenges in monitoring, tracking and interception, requiring the use of satellites, intelligence, and underwater sensors. For a military commander, the task of protecting seabed submarine cables from attack can seem almost impossible.

Given this conclusion, national strategies may need to focus on alternative methods of safeguarding the exchange of information. One method would be to increase the level of redundancy within the system by laying additional cables. As cables are expensive and most cables are privately owned, additional routes have to be assured of sufficient funding to make them viable. Somewhat ominously, the International Cable Protection Committee (which represents cable owners) states that “most cable owners feel that there is enough diversity in the international submarine cable network.” This might be true if the only threat is from accidental damage. However, this analysis might change with the realistic prospect of deliberate targeting.

### Aff Fails --- 2NC

#### Redundancy solves BUT the impact is inevitable – they’re IMPOSSIBLE to monitor

Starosielski 15 – Nicole Starosielski is from the New York University. (Nicole Starosielski, "Are the Internet's Undersea Cables at Risk for Sabotage?," livescience, 11-4-2015, https://www.livescience.com/52685-are-the-internets-undersea-cables-at-risk-for-sabotage.html, Accessed 7-5-2022, LASA-SC)

The fact is it’s incredibly difficult to monitor these lines. Cable companies have been trying to do so for more than a century, since the first telegraph lines were laid in the 1800s. But the ocean is too vast and the lines simply too long. It would be impossible to stop every vessel that came anywhere near critical communications cables. We’d need to create extremely long, “no-go” zones across the ocean, which itself would profoundly disrupt the economy.

Fewer than 300 cable systems transport almost all transoceanic traffic around the world. And these often run through narrow pressure points where small disruptions can have massive impacts. Since each cable can carry an extraordinary amount of information, it’s not uncommon for an entire country to rely on only a handful of systems. In many places, it would take only a few cable cuts to take out large swathes of the internet. If the right cables were disrupted at the right time, it could disrupt global internet traffic for weeks or even months.

The thing that protects global information traffic is the fact that there’s some redundancy built into the system. Since there is more cable capacity than there is traffic, when there is a break, information is automatically rerouted along other cables. Because there are many systems linking to the United States, and a lot of internet infrastructure is located here, a single cable outage is unlikely to cause any noticeable effect for Americans.

### SQ Solves --- 1NC

#### Satellites solve

Hitchens 22 – Theresa Hitchens is the Space and Air Force reporter at Breaking Defense. The former Defense News editor was a senior research associate at the University of Maryland’s Center for International and Security Studies at Maryland (CISSM). Before that, she spent six years in Geneva, Switzerland as director of the United Nations Institute for Disarmament Research (UNIDIR). (Theresa Hitchens, "US needs to temper reliance on at-risk undersea internet cables, satellites can help: Aerospace," Breaking Defense, 2-3-2022, https://breakingdefense.com/2022/02/us-needs-to-temper-reliance-on-at-risk-undersea-internet-cables-satellites-can-help-aerospace/, Accessed 7-5-2022, LASA-SC)

“Government and industry should continue to secure the communications enterprise—including undersea, terrestrial, air, and satellite segments,” the study states.

In particular, the study finds that new, high-capacity broadband satellites could provide backup for undersea cable infrastructure (UCI). These include the emerging mega-constellations in Low Earth Orbit (LEO) such as SpaceX’s Starlink and Amazon’s Project Kuiper.

“Although UCI will continue to offer unrivaled backbone capacity for years to come, space-based solutions … will offer alternate secure data paths,” the study says. Aerospace Corporation is a non-profit federally funded research and development center that advises the US government on aerospace policy issues, and pioneers technology solutions.

The study also suggests that the US consider working with the international community to develop norms of behavior around best practices and against damaging cables as they cross the high seas, as well as working with allies and partners to beef up best practices to secure facilities and enhance resilience, and to share information on threats.

Gordon stressed that the key takeaway from their in-depth study is that US needs to bring together all the different communications sectors that up to now have functioned primarily in stovepipes in order to both secure UCI and establish resilient hybrid networks. This includes supporting the development of emerging technologies.

For example, she noted, the Pentagon’s Space Development Agency (SDA) already is playing a key role with its effort to build a data transport layer for military communications in LEO to augment current Pentagon satellites. As part of that effort, it is investing in the development of optical inter-satellite links that are crucial for LEO-based megaconstellations to function.

### U.S. Naval Dom Inev

#### U.S. naval dominance is locked in and inevitable---any factor that affects us is worse for competitors

Robert Kaplan 17, senior fellow at the Center for a New American Security and a senior advisor at Eurasia Group, 1/24/17, “America Is a Maritime Nation,” <http://www.realclearworld.com/articles/2017/01/24/america_is_a_maritime_nation_112189.html>

The United States, bordered by two oceans, is a maritime nation. Not only is its Navy the largest in the world by far, but its coast guard would qualify as the 12th largest fleet in the world. The U.S. Navy is America's foremost strategic instrument -- much more so than its nuclear arsenal, which in all probability can never be used. The U.S. Navy is on the high seas around the world in peacetime as well as in wartime, guarding the sea lines of communication and the main maritime choke points. This, in turn, allows for a free global trading regime and guarantees access to hydrocarbons for America's allies. This Navy, by the way, also allows for an inland strike capacity. To wit, America bombed Iraq, Afghanistan, and Kosovo from warships in the Indian Ocean and the Adriatic Sea.

Historically, America is not unique in this regard. Athens, Venice, and Great Britain were all great global maritime powers. So were Holland and Portugal. Maritime powers, with exceptions of course, were generally more benign than land powers such as Germany and Russia. For while armies invade, ships make port visits and facilitate commerce. Navies also do not occupy foreign territory to anywhere near the extent that land forces do. While armies are required for unpredictable contingencies, navies (and air forces) project power on a daily basis. America might have gotten into unnecessary wars in Vietnam and Iraq, but American power is undiminished, largely because of the size of its Navy and Air Force. Finally, the U.S. Navy helps keep America engaged but out of trouble.

If we consider ourselves a maritime nation, chances are that we will make fewer mistakes in foreign policy, since naval power is about protecting commerce and a free trading order more than about having imperial-like possessions and interests. This is why a Navy can deploy anywhere all the time, though sending large numbers of ground troops overseas often involves a debate in Congress.

The United States currently has a Navy with almost 300 warships. This is an important fact, since if America's Navy had only, say, 200 warships, the world would be a very different place. It would be considerably more violent and anarchic than it already is. The U.S. 7th Fleet essentially keeps the peace in East Asia, while the U.S. 5th Fleet helps prevent war between Iran and the Arabian Gulf states, including Saudi Arabia.

This 300-ship Navy, combined with America's other armed services, gives the United States more power than any other nation in the world. Yet we must keep in mind that this considerable power does not equal overwhelming power. It is in the space between these two concepts that much of the violence and instability in the world takes place. For even a 600-ship Navy, or even an army much larger than our present one, would be unable to prevent the collapse of states across the Middle East. America, in other words, while guarding its interests, must be prepared to tolerate a world where it is not in control.

Let me elaborate on this.

America's ability to influence the world will likely decrease, but the ability of other powers to do likewise will also decrease over time, owing to internal economic challenges in China, Russia, and Europe that dwarf America's own economic problems. Thus our power will increase relative to other major states and unions, even as it decreases in absolute terms around the world. In all this, our Navy will be a barometer for our national health: this is because maritime platforms are frightfully expensive, thus the ability to maintain a Navy the size of ours requires public support through taxes and a healthy rate of increase in the gross domestic product.

A big Navy says a lot about who we are. And given the structural economic weaknesses of China, Russia, and Europe, I believe it is questionable whether they can keep up with the U.S. Navy over the long run. The big unknown is not Russia, which is a near-term threat rather than a long-term one, but China: Can it really reform its economy? I am not sure.

## Black Sea Answers

### Black Sea Non-UQ---1NC

#### Black Sea non-unique – Russia’s already militarized.

Ukrinform 7/3— Ukrinform (?), 7-3-2022, "Six Russian Kalibr missile carriers deployed in Black Sea," No Publication, https://www.ukrinform.net/rubric-ato/3506080-six-russian-kalibr-missile-carriers-deployed-in-black-sea.html, accessed 7-3-2022 //THS—OLW

Russian ships and long-range bombers continue to launch missile strikes on the Ukrainian territory from the Black Sea and the Sea of Azov. Currently, there are six enemy cruise missile carriers in the Black Sea with up to 36 missiles.

“The aggressor continues to launch missile and air strikes on the territory of our state with the use of air-launched and sea-launched cruise missiles. On June 12, four Tu-22M3 long-range bombers launched from the waters of the Sea of ​​Azov at least three Kh-22 cruise missiles on the Ukrainian territory in Selydove and Pokrovske, Donetsk region. In addition, on June 11, up to four Kalibr sea-launched cruise missiles were fired from the Black Sea at Ukraine's civilian and military infrastructure in Ternopil region," Oleksandr Motuzianyk, Spokesperson for the Ministry of Defense of Ukraine, said at a briefing at the Media Center Ukraine–Ukrinform.

He noted that the main goal of the Russian command at this stage, apart from reaching the administrative borders of Luhansk and Donetsk regions, is to block Ukraine's maritime links.

“Black Sea Fleet ships in the Black Sea and the Sea of Azov continue to isolate the combat area, conduct reconnaissance, and support fire in Prymorsky direction. The aggressor blocks civilian shipping in the northwestern part of the Black Sea," said the Spokesperson for the Ministry of Defense of Ukraine.

According to him, six Russian carriers of Kalibr cruise missiles with up to 36 missiles are on alert in the Black Sea.

Moreover, the threat of missile and air strikes from the territory of Belarus remains, Motuzianyk added.

## China Mines Answers

### SQ Solves Taiwan Deter

#### Squo solves Taiwan deterrence

Joe Saballa 22, reporter for the Defense Post, 1/17/22, Taiwan Deploys Minelaying Ships to Defend Against China,” *The Defense Post*, https://www.thedefensepost.com/2022/01/17/taiwan-minelaying-ships-china/

The Taiwanese Navy has [deployed](https://focustaiwan.tw/politics/202201140010) two minelaying ships from its Zuoying naval base to bolster the country’s maritime defenses amid [increasing tensions with China](https://www.thedefensepost.com/2022/01/11/taiwan-defense-budget/).

Commissioned as part of the island’s first two minelaying squadrons, the two new minelayers will automatically lay large numbers of small but powerful sea mines without the need for divers.

According to vessel producer Lungteh Shipbuilding, each minelayer is 41 meters (134 feet) long and 8.8 meters (28 feet) wide. It also has a reported full-load displacement of 347 tons.

The ships are armed with T-75 20-millimeter cannons, T-74 7.62-millimeter machine guns, and three mine-laying tracks. They are also equipped with an automatic mine-laying system developed by the National Chung-shan Institute of Science and Technology.

From 2017 to 2021, the Taiwanese Navy allocated $33 million to build four fast minelaying ships to enhance its maritime defense around the island.

The deployment of new minelaying ships comes more than a month after the Chinese military conducted [island-bombing and mine-laying exercises](https://www.thedefensepost.com/2021/12/06/china-mine-laying-drill-sea/) in the South China Sea near Taiwanese territorial waters.

### No Taiwan Invasion

#### No Taiwan invasion – military risk and domestic costs.

Roy 21 – Denny Roy, Political Science PhD at the University of Chicago. Professor at the Asia-Pacific Center for Security Studies. [Rumors of War in the Taiwan Strait, 3-12-2021, https://thediplomat.com/2021/03/rumors-of-war-in-the-taiwan-strait/]

For Taiwan and its friends, however, the situation is not as dire as portrayed by those warning that Beijing will soon opt for war even in the absence of a major provocation from Taiwan.

For domestic political reasons, China is extremely unlikely to embark on a war of choice against Taiwan in the next year. In February 2022 Beijing will have the opportunity to present itself in the best possible light to a massive international audience when it hosts the Winter Olympics, in which the Chinese government has invested lavishly. A cross-strait war would ruin this party. In October 2022, the CCP will hold its 20th National Party Congress. Xi Jinping will be up for a third term as CCP general secretary. It is hard to imagine Xi starting an unnecessary war with Taiwan prior to his re-appointment because of the high risk that war-related economic and even political turmoil would erode Xi’s popularity.

Even with the PLA’s improved capabilities, military action against Taiwan is an extremely risky proposition for China. An attempted invasion across the strait would involve the largest and most complex amphibious operation in history, and this by a military with no significant combat experience since 1979, when it performed badly in a border war against Vietnam. China could more confidently capture one of the ROC’s smaller outlying islands or impose a blockade on Taiwan’s major ports, but neither of these approaches would guarantee Taipei’s surrender.

Chinese analyst Cui Lei of the China Institute of International Relations recently argued that Chinese leaders feel compelled to maintain an image of toughness toward Taiwan, but have no intention to launch a military attack in the foreseeable future. Cui argued that military action is daunting because Taiwan’s people will not submit without a fight; the United States would help defend Taiwan out of fear of losing U.S. leadership in the region; China is not as militarily strong as the United States; war would cause discontent in China; and the international backlash would derail China’s progress toward modernization.

As is required of any paramount leader in China, Xi affirms his commitment to unification. But how deeply Xi is committed to the objective of making Taiwan a province of the PRC during his tenure is unknown. There are other issue areas where he could strive for accomplishments to bolster his legacy, such as cleaning up and rejuvenating the CCP, presiding over successful restructuring of the Chinese economy, ushering China out of the “middle income trap,” and of course blessing humanity with Xi Jinping Thought.

The notion that Chinese aggressiveness on other fronts presages an attack on Taiwan is questionable. The consequence of that aggressiveness is that China simultaneously suffers from poor or damaged relations with India, Japan (due to the Senkaku-Diaoyu Islands dispute), Australia (economic coercion), some of the Southeast Asian states (the South China Sea dispute), and the United States (on several issues). On top of this, China is battling against accelerated economic decoupling, which could slow Chinese economic development. Already dealing with multiple crises in its foreign relations is more likely to give Beijing pause than to encourage the Chinese leadership to initiate an additional, larger crisis. The situations of Hong Kong and Taiwan, their relationships to Beijing, and the PRC’s policies toward them are completely distinct. The imposition of the National Security Law in Hong Kong is the culmination of political struggle that dates back to 2002 and is disconnected from PLA readiness to go to war with Taiwan.

### U.S. Involve = War

#### Getting in China’s way inflames tensions

Peter Martin 22, Peter Martin is a defense industry journalist with a degree in journalism, 6/12/22, “China alarms U.S. with new private warnings to avoid Taiwan Strait: ‘We’re seeing growing coercion from Beijing’,” *Fortune*, https://fortune.com/2022/06/12/china-alarms-us-with-new-private-warnings-to-avoid-taiwan-strait-were-seeing-growing-coercion-from-beijing/

Chinese military officials in recent months have repeatedly asserted that the [Taiwan Strait](https://en.wikipedia.org/wiki/Taiwan_Strait) isn’t international waters during meetings with U.S. counterparts, according to a person familiar with the situation, generating concern within the Biden administration.

The statement disputing the U.S. view of international law has been delivered to the American government by Chinese officials on multiple occasions and at multiple levels, the person said. The U.S. and key allies say much of the strait constitutes international waters, and they routinely send naval vessels through the waterway as part of freedom of navigation exercises.

China has long [asserted](https://www.scmp.com/comment/insight-opinion/article/3004863/us-warships-and-pla-jets-whats-really-behind-taiwan-strait?module=perpetual_scroll_0&pgtype=article&campaign=3004863) that the Taiwan Strait is part of its exclusive economic zone, and takes the view there are limits to the activities of foreign military vessels in those waters. While China regularly [protests](https://www.foxnews.com/world/china-protests-us-navy-destroyers-taiwan-strait) U.S. military moves in the Taiwan Strait, the legal status of the waters previously wasn’t a regular talking point in meetings with American officials.

It’s not clear whether the recent assertions indicate that China will take more steps to confront naval vessels that enter transit the Taiwan Strait. The U.S. also conducts freedom of navigation operations in the South China Sea to challenge Chinese territorial claims around disputed land features.

The Pentagon didn’t immediately respond to a request for comment. China’s Foreign Ministry also didn’t immediately respond outside of normal business hours.

### No China War --- 1NC

#### **China war has no escalation.**

Lei 20, PhD and MA in International Politics, associate research fellow with the China Institute of International Studies. (Cui, 7-24-2020, "Despite heated talk, risk of a US-China hot war is small", *South China Morning Post*, <https://www.scmp.com/comment/opinion/article/3094121/why-risk-us-china-hot-war-small-despite-heated-talk>)

Many observers are pessimistic about deteriorating US-China relations and believe the two countries are heading towards a cold war. Even worse, some argue that the situation might be more dangerous than the US-Soviet Union Cold War, and that a hot war might break out between the two. This argument is unconvincing. First of all, deterrents to a flare-up are much stronger in US-China relations than in US-Soviet relations. Although economic and people-to-people ties between China and the US are declining, they are still close compared to US-Soviet ties. It is hard to decouple two closely intertwined economies and societies. Take two examples. China is expected to become the world's largest consumer market, a temptation hard to resist for exporters, including those from the US. And in education, more than 300,000 Chinese students study in the US, bringing in huge revenues for the US education industry. Many universities go to great lengths to woo international students. Recently Harvard and the Massachusetts Institute of Technology even sued the government over its new visa restrictions, now aborted, on international students. Second, even if there is decoupling, the pain would not be too great and can be kept out of the national security sphere if properly handled. In fact, for national security reasons, a modest degree of isolation will make both sides more secure and comfortable. For instance, if China’s information technology equipment cannot capture Western markets, the US will be more relaxed. If China cannot get advanced technologies from the US and its technological progress slows down, the US will be less anxious. In the same vein, China feels assured knowing that if the Trump administration does impose a travel ban on Communist Party members, it would be abandoning one of the tools available to the US to promote “peaceful evolution” in China. Economic decoupling is undeniably more painful for China than for the US. But unlike Japan during WWII, which was hit hard by the US oil embargo because of its lack of natural resources, China has no such problems. Given its large domestic market, losing the US as a major customer is not a disaster for China, and can be compensated through more dynamic economic activities at home. China can also make up for being freezed out of technological exchanges by turning to indigenous innovation. As for the US, it can import goods from other developing countries, albeit less cheaply. The relative loss is acceptable when weighed against the heightened perception of economic independence and security. Third, the ideological confrontation between China and the US is less intense than that during the Cold War. Unlike the obsession with ideology in those days, the line between capitalism and socialism is blurred today. The market economy has become universally recognised as the best way to promote economic growth and, politically, many countries have embraced democracy. Even North Korea calls itself the Democratic People’s Republic of Korea. Although ideological hawks in the US still long for the day when the beacon of freedom will light up the world, after many years of fighting bloody wars overseas, most American people are not interested in promoting democracy abroad. Meanwhile, China just wants to preserve its political system and has no interest in exporting it to other countries, as the Soviet Union did. Thus, ideological antagonism in China-US relations can easily be eased by calculations of realistic interests, which create conditions for compromise and cooperation. Fourth, both China and the US have many options other than war to achieve their policy goals. While they have no allies to serve as a buffer, given the nature of the potential conflict in the South China Sea or Taiwan Strait, both countries are adept at operating in grey zones and fighting psychological, public opinion or diplomatic warfare below the threshold of war. The forced closure of the Chinese consulate in Houston by the US government is just the latest act of brinkmanship. In addition, given China’s huge economic and financial interests in the US, the latter can wield the stick of sanctions when use of force is highly risky or not worth it. When both sides have many tools and options, why would they rush to war to achieve their goals? Last but not least, the imbalance of power will act as a deterrent. Some say the US and Soviet Union did not fight a hot war because they were evenly matched. It was not the case, actually. At the beginning of the Cold War, the Soviet Union was at a relative military disadvantage. Moreover, a country needs the will to fight before going to war, even if it is stronger militarily than its adversary. Having fought years of meaningless wars, the US is weary of war. China, too, abhors war. Having a clear understanding of US strength, especially when its own economy is slowing down and it is facing various domestic challenges, China would not wish to recklessly start a war with the US. In summary, the possibility of a hot war between China and the US is very small. The greatest danger for China is not a cold or hot confrontation with the US, but policymakers’ interpretation of the momentary hostility towards Beijing of a portion of the American population and the larger world. An erroneous interpretation could end China’s march to further opening up, and see it turn instead towards self-isolation.

### No China war

#### Taiwan’s already pursuing it in the squo

Associated Press, 1/14/22, “Taiwan adds minelaying ships to defenses against China,” *Defense News*, <https://www.defensenews.com/naval/2022/01/14/taiwan-adds-minelaying-to-defenses-against-china/>, JH

Taiwan on Friday commissioned new naval minelayers to add to its [defenses against rival China](https://www.defensenews.com/global/asia-pacific/2021/03/01/whats-preventing-taiwan-from-preparing-for-potential-war/). President Tsai Ing-wen presided over a commissioning ceremony for the Navy’s First and Second Mining Operations squadrons, which will operate ships able to automatically sow large numbers of small but powerful mines at high speed without the need for divers. Such technologies are part of a strategy to deter any possible invasion from China, with its huge military and vast superiority in numbers of aircraft, ships and other weaponry.

#### No US-China war---Talmadge is wrong

Dennis C. Blair 19, Chairman of the Board and Distinguished Senior Fellow (Non-Resident) of Sasakawa Peace Foundation USA, Would China Go Nuclear? https://www.foreignaffairs.com/articles/2018-12-11/would-china-go-nuclear

Talmadge’s basic argument is that in any conflict with China, the United States will immediately launch a full-scale air and missile assault against military targets in mainland China and against Chinese attack submarines at sea. In so doing, she argues, the United States will inadvertently hit either China’s ballistic missile submarines or its mobile nuclear missiles. That, in turn, will present Chinese leaders with a “use it or lose it” dilemma concerning their nuclear arsenal, and they may well decide to launch a nuclear attack against the United States.

Such a scenario is extremely unlikely; indeed, I would say the odds are somewhere between nil and zero. A U.S.-Chinese conflict would be a maritime campaign in which the two sides tried to conquer or defend islands. Attacks on land targets beyond the contested islands and the waters around them, whether carried out by the United States against Chinese territory or by China against U.S. overseas bases, would be aimed at military installations and systems that supported the maritime campaign—ports, air bases, and command-and-control centers. The intercontinental nuclear deterrent forces of both countries are physically separate from these facilities.

In addition, U.S. planners are very mindful of the danger of attacking any state’s nuclear arsenal and take extraordinary precautions to avoid doing so. Although there is always a chance for an isolated mistake, it is in fact possible to distinguish nuclear-armed submarines from conventional ones. Likewise, it is possible to distinguish the shorter-range, dual-use missiles that threaten Taiwan, China’s neighbors, and U.S. bases in the Pacific from the intercontinental missiles that threaten the United States.

If by mistake a U.S. strike destroyed a land-based medium-range nuclear missile or sank a ballistic missile submarine, China would be greatly concerned, but it is highly unlikely that Beijing would respond by reflexively launching a nuclear attack against the United States. Rather, before even considering violating their long-held “no first use” doctrine, Chinese leaders would wait to see if a concerted, sustained U.S. campaign against their nuclear arsenal was under way. The United States has no incentive to attempt such a campaign and in fact would take every precaution to avoid it.

### China Not Revisionist

**China isn’t revisionist**

**McKinney 19**, \*Jared Morgan; PhD candidate at the S. Rajaratnam School of International Studies, Nanyang Technological University (Singapore); \*\*Nicholas Butts; Center for Strategic and International Studies Pacific Forum Young Leader. He holds an LL.M. from Peking University, an MSc from The London School of Economics and an MPA from Harvard University where he was also a Crown Prince Frederik Scholar and a Cheng Fellow. (Winter 2019, “Bringing Balance to the Strategic Discourse on China’s Rise”, *Journal of Indo-Pacific Affairs*, pg. 75-76, <https://www.airuniversity.af.edu/Portals/10/JIPA/journals/Volume-02_Issue-4/McKinney.pdf>)

In the abstract, such claims are alarming—in context, and in balance, rather humdrum. In fact, the **evidence** of any Chinese intention to destroy, or even merely **undermine** and exploit, the current order is **slight**. China **is** certainly using its growing military power to **defend** its **claims in the SCS** and even—on occasion— to coerce its neighbors. It uses **protectionist** economic **policies** to boost the prospects of Chinese companies and reduce competition. It employs **economic statecraft** to serve its interests abroad. And it certainly is opposed to America’s policy of global democracy promotion. However, **none** of these positions **fundamentally challenge the existing order**, **none** of them **radically depart** from America’s **own actions** when it was a **rising power** in the nineteenth century, and none of them **obviously surpass** America’s **own contemporary record** of **order subversion**.

When the **U**nited **S**tates was a rising power, it took **half of Mexico** and **considered taking the rest**, it **colonized** the **Philippines** and **Hawaii**, and it **unilaterally seized** the **maritime choke points of the Caribbean** (Puerto Rico and Cuba).21 The United States used **tariffs**—which by 1857 averaged 20 percent22 and by the end of the nineteenth century were “the highest import duties in the industrial world”23—to **protect its industries**. It **stole intellectual property**,24 and it **ideologically challenged** the governments of the “Old World.” Today, despite no longer being a rising power, the United States has launched two **disastrous invasions**, **tortured prisoners**, and dispatches **drone strikes at a whim** with **little international legal authority**.25 The point is not that two wrongs make a right; it is that international order is **much more resilient** than **critics seem to realize**,26 and it is **utopian** to expect any **rising Great Power** to act in a way that **uniformly satisfies** one’s **moral scruples**, evolving, in Friedberg’s words, “into a mellow, satisfied, ‘responsible’ status quo power.”27

Friedberg or Harris might object that America’s rise took place in the context of a different order. This is perfectly true, but the more important point is that the long nineteenth century (1815–1914)—the era of America’s rise—was the first iteration of the New Peace.28 The implication is that relative peace **can** and **has** **coexist**ed with **limited wars**, **property** and **territorial thefts**, acts of **coercion**, and **aggressive assertions of status.** This does not mean any of these are **desirable**— they are not—but it shows that they **need not be fatal to the system**. Insofar as there **is** a lesson from that **first period** of **relative peace**, it is that **Great Power confrontation** is the **one thing that is fatal**. Accepting this does not mean **capitulating** in **every instance**, as implied by some,29 but it **does** mean **rediscovering** the rules of **Great Power competition**30 alongside the art of strategy.31

Focusing only on areas that China’s rise violates the scruples of the established powers, moreover, downplays the extent to which China, **has**, in fact, **conformed** to the **existing order.** As a RAND Corporation report published in 2018 concludes, China has been a supporter—albeit a conditional one—of the international order: “Since China undertook a **policy of international engagement** in the 1980s … the level and quality of its participation in the order rivals that of most other states.”32 The way in which **Xi** Jinping, following his 2017 Davos speech in defense of globalization, has been heralded as the **most prominent champion of international order** and **defender of globalization** underscores the fact that there are **different elements** of this order, and that China supports **many**, if not **most, of them**. Even in places where China is **supposedly “altering”** the current order, Beijing tends to simultaneously **affirm that order**. China’s Asian Infrastructure Investment Bank, for instance, actually **mirrors existing structures**, and China has intentionally copied elements and “best practices” of the World Bank and Asian Development Bank. China is **playing the same game**, even if it is **seeking a bigger role within it**.33

#### Empirics disprove Chinese revisionism—defensive realism has more explanatory power

Jalil 19 - Research Fellow at the Institute of Strategic Studies Islamabad (Ghazala, <http://issi.org.pk/wp-content/uploads/2019/04/3-SS_Ghazala_Yasmin_Jalil_No-1_2019.pdf>)

However, since the 1970s China’s policies have shown less revisionist tendencies. The country has increasingly become a state that is embracing defensive realism. One thread of this evidence is that China has toned-down its revolutionary rhetoric. It is also not supporting insurgencies in other countries. The second thread of evidence is that since the late 1970s China has increasingly pursued a cooperative security approach in its relations with regional neighbours and in the international arena. By and large, China has tried to forge friendly relations with its neighbours. It includes ameliorating relations with states like India which is traditionally a rival. Their relations did become strained in 2017 when there was a standoff between the Indian and the Chinese forces on the Doklam plateau. Dhoklam is a territory claimed both by Bhutan (aligned with India) and China. However, Indo-China relations improved as the two countries held an informal summit in China in April 2018.30 The two countries even held a joint military exercise in December 2018, called Hand-in-Hand.31 Over the years, China has also managed to resolve border issues with so many neighbouring states. It has settled border disputes with countries like Myanmar, Nepal and Pakistan initially and recently with Russia, bordering the Central Asian States and Vietnam.32 Moreover, China has territorial disputes with India and Japan but it has never made these disputes a hurdle in forging friendly ties with these two countries. Avery Goldstein dubs it a neo-Bismarckian grand strategy of China whereby it is pursuing its interests by reassuring those who may feel threatened and may form anti-China alliances.33 This, in his opinion, has resulted in a security environment that is conducive for China as well as for the region as a whole. Another indication that China does not show aggressive behaviour in its policies is that China has increasingly engaged and integrated with the international community. Over the past 30 years, China has amply demonstrated this by its increasing membership of international organisations and institutions as well as membership of treaties since the 1980s. China has increasingly participated in the regional multilateral institutions over the years. In the last few decades, East Asia has seen a number of regional institutions being formed. Foremost among those are the Asia Pacific Economic Cooperation (APEC); the ASEAN Regional Forum (ARF); ASEAN plus 3 and the East Asia Summit. China is part of most of these multilateral institutions as well as an active member of the Shanghai Cooperation Organisation (SCO). China was also a key player in the sixparty-talks in getting North Korea to halt and roll back its nuclear and missile programmes. On the global front, China sought participation in global institutions like the World Trade Organisation (WTO). China is also playing a very active role in the UN. According to one figure, China’s membership of international governmental organisations doubled (from 21 to 52) during the years 1977-1997. In the same time period, its membership of International Non-Governmental Organisations (INGOs) increased from mere 71 to an impressive 1,163.34 Similarly, according to another account, China signed less than 30 per cent of the arms control accords it was eligible to join in the 1970s compared to 80 per cent by mid-1990s. 35 China has actively taken part in the treaties of the nuclear non-proliferation regime as well as those of aimed at non-proliferation of biological and chemical weapons. It has also become a part of the voluntary non-proliferation groups like the Nuclear Suppliers Group (NSG) in 2004 and exercises strict export control policies. Since 2004, China has also shown interest in joining the Missile Technology Control Regime (MTCR). This is an indicator of China’s willingness to participate in international institutes and regimes, increasing comfort towards norms of interdependent behaviour among states. It has also exhibited the desire to somewhat shape the rules of the game for regional cooperation. This is definitely an indication of its tendency towards the status quo. It also advances China’s national interests and helps dispel concerns about its increasing economic and military power.36 This is also an indicator that China is willing to work in the existing Western-dominated systems of international institution and regimes rather than challenge the system or seek to break it up. Moreover, China consciously pursued a good neighbour policy. The pursuit of good relations with its neighbour is the foundation of its strategy for economic development. It has the dual benefit of attracting foreign trade and investment while, at the same time, it reassures its neighbours that it does not present a threat for them. Deng Xiaoping laid two paths for China’s foreign policy in 1990 ─ anti-hegemonism and establishment of a new multi-polar international order of politics and economics. This meant that China adopted a policy of active defence of China’s interest ─ of minding its own business and be neither a leader nor a challenger but a participant or co-builder of the westerns international order.37 This remains the foundation of China’s foreign policy today. Many analysts, however, argue that participation in the international institutions is not an adequate indicator but compliance with the norms, rules and goals of these institutions is a better indicator of whether a country is a status quo state or not. Along these lines, Alastair Johnston considers China’s compliance with five global normative regimes: these include sovereignty, free trade, non-proliferation and arms control, national self determination and human rights.38 As far as sovereignty is concerned he writes: “Today China is one of the strongest defenders of a more traditional absolutist concept (of sovereignty).”39 Similarly, free trade is another international norm that is seen as an indicator of status quo behaviour. China has moved to support the norms of global free trade. China’s membership of WTO in 2001 is a testament to its support for free trade. China’s tariff rates have declined from over 40 per cent in 1992 to less than 20 per cent in 1997.40 In 2015, the tariff rate was 3.4 per cent.41 China has gradually embraced global capitalist institutions and system. In the Belt and Road Forum that China held in May 2017, hosting 30 world leaders, it released a communiqué, which was signed by all 30 world leaders present on the occasion that emphasised the need to “build an open economy, ensure free and inclusive trade (and) oppose all forms of protectionism.”42 However, the ongoing trade war with the US has forced China to increase its tariffs. Since 2017, the US had imposed three rounds of tariff on the Chinese products worth US$250 billion. China has retaliated by imposing US$110 billion on the US goods. Beijing has accused the US of starting the “largest trade war in economic history.” 43 This damages the global free trade regime. China has gone even a step further and initiated projects like the China Pakistan Economic Corridor (CPEC), which is envisaged as a journey towards economic regionalisation. The CPEC is a framework of regional connectivity which is expected to be beneficial for China and Pakistan as well as the regional states like India, Iran, Afghanistan and Central Asia. Its primary aim is to promote geographical linkages and improve infrastructure connectivity. It would also result in a higher flow of trade and businesses in the region.44 Its ultimate aim is to have a well-connected region, promote harmony and accelerate economic development. This is also a clear indication that China is focused on economic development and regionalisation instead of displaying aggressive hegemonic behaviour. As far as China’s non-proliferation record is concerned, it has a fair record, with no blatant violations of international nuclear non-proliferation norms. The prevailing concerns mostly centred on the transfer of missile technology and components to Pakistan in the 1980s and early 1990s. However, China has not signed the 1987 MTCR, so it does not amount to any violations of China’s treaty obligations. On the positive side, in 1996, China signed the Comprehensive Test-Ban Treaty (CTBT), which a major nuclear non-proliferation proponent like the US has not done till date.45 It has been cooperating with the Comprehensive Test Ban Treaty Organisation (CTBTO) and has installed four new International Monitoring System (IMS) stations, bringing the total number of certified stations in China, to five. Furthermore, it is also a part of the Nuclear Non-Proliferation Treaty (NPT) since the time that it was signed. Moreover, along with Russia, China has long been trying to get a treaty negotiated to ban the stationing of offensive weapons in outer-space. For nearly two decades, now there have been the Chinese and Russian efforts to negotiate a treaty for Prevention of an Arms Race in Outer Space (PAROS). Many proposals have been put forward including the two Chinese working papers and a joint China-Russia working paper in the Conference on Disarmament (CD). However, PAROS remains blocked due to the US refusal to negotiate any such treaty because it goes against its missile defence and space plans.46 China has also played a stabilising role in the North Korean nuclear issue. It acted as a lynchpin in hosting and conducting the six-party talks, which were meant to solve the North Korean nuclear issue. Even after the breakdown of the six-party talks in 2009 and the recent high tensions on the Korean Peninsula in 2017 with the US, China played the role of a stabiliser, urging both sides to show restraint and emphasising that war was not an option for any country. China has, thus, helped strengthen the international nuclear non-proliferation norms. Also, China’s growing soft power47 or its “charm offensive” in Southeast Asia and elsewhere is another indicator that it is not an aggressive, power maximising state. Its economic progress has been accompanied by its increasing cultural and diplomatic influence around the globe. Its growing soft power is not only evident in Southeast Asia but also in Beijing’s economic partnerships in Latin America and Africa.48 The fact that China is able to attract and appeal the states in the region through its soft power is an indicator that its neighbours are increasingly viewing China as less of a threat. However, this has stirred the concerns of waning the US influence in the region. In many parts of Asia, Africa and the Latin America, the “Beijing Consensus” which advocates a mix of authoritarian government and market economy, is overtaking the “Washington Consensus” of market economics and democratic government which was popular in the past.49 With signs that the US is placing emphasis on hard power under President Donald Trump, China seems to be positioning itself as a champion of globalisation and economic integration. It seems to be placing an emphasis on soft power. Taiwan issue is one instance where China’s policies are viewed by the West as a non-status quo. However, the issue can be seen in terms of a security dilemma between the US and China. In the last few decades, America continued selling advanced weapons to Taiwan, mainland China considers these developments to encourage Taiwan’s independence and a threat to its interests. According to Yiwei Wang, “on the Taiwan issue, America’s logic is that peace comes from “balance of power.” China has time and again protested the matter of arms sales to Taiwan with the US but to no avail. China sees these moves as an effort to change the distribution of power in the region. In turn, China has threatened Taiwan against moves for independence and deployed missiles on the mainland as well. Consequently, this makes the US suspicious of China’s revisionist intentions towards Taiwan – locking the two powers in a security dilemma. Another area where China has been accused of displaying revisionist tendencies is in the South China Sea. The dispute centres on territorial claims over two island chains the Paracels and the Spratlys and surrounding oceans. The area provides valuable trade passage and fishing ground, as well as holds hydrocarbon resources ranging from 25,000 Mboe to 260,000 Mboe.51 China, Vietnam, the Philippines, Taiwan, Malaysia and Brunei all have competing claims. The dispute has existed for centuries but things got tense in the last few years. China has been island-building since 2014 and has also increased naval patrols. It can be argued that China’s actions are defensive in nature. The US has had increased interference in the area. Under the garb of “freedom of navigation” operations, the US sent planes and ships in the disputed area to keep access to key shipping and air routes.52 In February 2017, the US deployed the aircraft carrier, Carl Vinson, strike force to the South China Sea under the garb of “freedom of navigation.”53 Another week-long US and British Naval exercise took place in January 2019.54 These are meant to send a signal to China to rescind claims over the disputed area. These exercises have angered China. China does not have expansionist or hegemonic designs in the South China Sea. It claims over the two island chains are not something new. Beijing has adjusted its strategy to safeguard its interests, as it becomes increasingly powerful. However, a military conflict over the dispute is not an option. Moreover, the US influence over other claimants of the territory complicates matters for China. This has resulted in China acting more assertively in the South China Sea in order to defend its interests. In fact, the US would act more aggressively if any country was to interfere in matters close to its borders. Overall, from the above analysis, it can be summarised that China has so far behaved more as a status quo power rather than as an aggressive revisionist power. This is apparent in China’s engagement with its neighbours, its participation in the regional and international institutions, it is in compliance with most of the international norms as well as its emphasis on projecting its soft power. The claims of Mearsheimer’s offensive realism are in contrast with Waltz’s defensive realism on several points. While Mearsheimer claims that great powers act aggressively and aim to gain so much power that they are the ultimate hegemons in the system, Waltz’s defensive realism sees the states as acting defensively to maintain rather than upset the balance of power. For Waltz, the states are primarily concerned with maintaining “their position in the system.”55 Defensive realists argue that offence-defence balance favours the defence. 56 Therefore, a robust defence and careful balancing should deter any aggressive impulses from great powers. Defensive realism argues that great powers are concerned with maintaining the status quo rather than maximising their power because often the cost of expansion outweighs the benefits. Defensive realism sees security dilemmas as a problem where an increase in the power of one state increases the insecurity of the other causing the latter to increase its power. Under the conditions of defensive realism, great powers would try to alleviate any security dilemmas rather than exacerbate it. China’s current policy seems to be firmly rooted in defensive realism. Its policy seems to be aimed at maintaining the balance of power rather than upsetting it. As the earlier section has argued, China is not a revisionist power but a status quo one. The analysts like Shiping Tang are convinced that China’s security strategy flows out of its realisation of the security dilemma whereby the Chinese leaders have understood that an aggressive expansionist strategy would just lead to counterbalancing alliances. “This recognition has led China to adopt a defensive realism-rooted security strategy emphasising moderation, self-restraint and security cooperation.”57 Moreover, China’s military modernisation, its Taiwan policy and its increased policies in the South China Sea also make more sense if seen through the lens of defensive realism. China’s Taiwan policy may be more geared towards preventing redistribution of power in the region. Since the US is providing arms assistance to Taiwan, China may be averse to the US aiding Taiwan’s independence ─ the latter issue is one where China has made clear that independence is not acceptable to China. Similarly, there is good evidence that China’s military modernisation programmes and training exercises since the Taiwan Strait Crisis of 1996 are aimed partially at dealing with the issue of the Taiwanese separation.58 On the question of whether China is balancing against the US, Johnston says, “There seems to be little doubt that China’s military modernisation programme since the mid-1990s has been aimed in large measure at developing capabilities to deter or slow the application of the US military power in the region.”59 It would then seem that China is not concerned with gaining power or projecting its powers but with balancing against a predominance of the US power in the region. China has not shown any signs of hegemonic behaviour as a lot of Western analysts feared. Instead of guided by offensive realism, China’s policies seem to be guided by defensive realism where it is concerned with survival and with maintaining its position in the system. Just as the US fears China’s hegemonic rise, China also fears the increase of the US influence in the region and its talk of containing China. China’s policy may change in the future to display hegemonic tendencies. However, at present, there is not much evidence to support the theory of offensive realism.

### 2NC --- China Deterred Now

#### Overwhelming, existing US posture deters China OR causes swift defeat.

Sawant 21, has a master’s in international affairs from Columbia University, where he concentrated in international security policy. He is a subject matter expert on military studies, defense, global security, and geopolitical risk analysis. Mangesh has more than 18 years of experience in studying military strategy and tactics, warfare, weapons systems analysis, conducting research, policy analysis and formulation, and developing case studies and lessons learned. His articles have been published in The National Interest, Small Wars Journal, Modern Diplomacy, Eurasia Review, E-International Relations, Indian Defense Review, Security Management. Geopolitical Monitor, Internationale Politik, and the Over the Horizon Journal. (Mangesh, “Why China Cannot Challenge the US Military Primacy,” *Journal of Indo-Pacific Affairs*, <https://www.airuniversity.af.edu/JIPA/Display/Article/2870650/why-china-cannot-challenge-the-us-military-primacy/)//BB>

The US military dominates the strategic, tactical, and operational levels of warfare across the spectrum. The Pentagon is implementing sophisticated network warfare programs such as the Advanced Battle Management System, Project Convergence, and Joint All Domain Command and Control. China is concerned about the lethal and distributed US military, equipped with a potent combination of quantity and quality of weapon systems. The USN surpasses the PLAN in rapid deployment, maneuverability, and expeditionary warfare capabilities. The overwhelming display of US military power since 1945 is a credible deterrent for Beijing. Since the First Gulf War, the United States has demonstrated its capability of destroying the adversary through preemptive strikes consisting of long-range weapon systems such as cruise missiles in the first few days of the war, giving no time for the adversary to retaliate.75 According to Taylor Fravel, China is not a military superpower.76 There is not much evidence about China’s plans for global military capabilities on par with the United States. China’s military power is miniscule as compared to United States’ former adversary the Soviet Union. China’s military will be thinly stretched defending the third-largest country in the world. The top echelons of the CCP and PLA acknowledge US military advantages. Chinese scholars like Xu Ruike and Sun Degang admit that China is an economic heavyweight but is a military featherweight and will remain so for the coming decades.77 US primacy in the post–Cold War world has prevented World War III. The two most likely contenders for expansion, North Korea and China, have restricted their militaries within their borders. The United States retains unrivaled military power, and China is not in a position to challenge it.

### 2NC --- China Not Expansionist

#### No spillover – China does not have broadly expansionist motives

Shifrinson, PhD, Assistant Professor of International Relations, Fredrick S. Pardee School of Global Studies, BU, ‘20

(Joshua, “The rise of China, balance of power theory and US national security: Reasons for optimism?” *Journal of Strategic Studies*, Vol. 43)

It is too early, however, to declare Chinese predation a fact, just as there are reasons to question whether Chinese predation is likely in the future. On one level, and consistent with research by scholars such as Avery Goldstein, Alastair Iain Johnston and others, there are less-competitive elements embedded in current Chinese strategy.61 Chinese land reclamation and military deployments in the East and South China Seas, for instance, have mostly involved territories previously claimed by the Chinese government – China has not expanded its maritime claims so much as taken a unilateral approach towards resolving existing disputes.62 Similarly, China’s ADIZ move came after Japan expanded its own ADIZ and began consolidating control over the disputed Senkaku Islands.63

It is also important to recognise that there are steps China could plausibly have undertaken in recent years yet chose not to. Despite concerns over a Chinese military build-up, for instance, China did not increase the share of state wealth allocated to military spending; military expenditures have remained at 1.9 per cent of Chinese gross domestic product (GDP) since 2009.64 Likewise, China has sustained a minimalist nuclear deterrent even though this force is vulnerable to disruption.65 Above all, China has not tried to form an anti-US alliance in East Asia – in fact, there is some evidence that China has sought to keep the United States engaged in East Asia rather than exclude it.66 For example, not only did Chinese President Xi Jinping tell US President Barack Obama in 2014 that the ‘Pacific Ocean has ample space to accommodate our two great nations,’ but China’s Xinhua news agency greeted Donald Trump’s election – after a campaign marked by calls for a reduced US role in the world – with a warning against US isolationism.67 These moves are not consistent with a predatory campaign: China is pursuing a mixed strategy that blends both cooperative and competitive elements.

## Iran Mines Answers

### Iran Wont close gulf

#### Iran won’t close the gulf

Edward Chang 19, Edward Chang is a freelance defense, military, and foreign-policy writer, 6/14/19, “How Iran Could Really Hurt America (And the World): Close the Strait of Hormuz,” *The National Interest*, <https://nationalinterest.org/blog/buzz/how-iran-could-really-hurt-america-and-world-close-strait-hormuz-62542>, JH

However, for reasons outlined earlier, the likelihood of a surprise closure is remarkably low. The United States and its allies are well-aware of such a possibility and have been, for decades, well-prepared for the scenario. The military superiority of the United States and its allies all but ensures an overwhelming defeat for the Ayatollah’s warriors. Most importantly, a surprise closure of the Strait acts to Iran’s detriment, unless the strategic environment is such that Tehran feels its back is against the wall and has little to lose from such desperation. Threatening closure is more useful than attempting one, thus, absent exigent circumstances, Iran’s leadership will always telegraph its intentions, if only to avoid a situation where they must choose between backing down and losing face or following through and hazard overwhelming defeat.

### No Iran War

#### No Iran wars.

Pollack 19 – Kenneth M. Pollack, a former CIA intelligence analyst and expert on Middle East politics and military affairs, a resident scholar at the American Enterprise Institute focusing on Middle Eastern political-military affairs, former Senior Fellow at the Saban Center for Middle East Policy, and former and a Senior Advisor at Albright Stonebridge Group. [Is war with Iran imminent? Here's the real truth, 5-16-2019, http://www.aei.org/publication/is-war-with-iran-imminent-heres-the-real-truth/]

Is the United States going to war with Iran? Probably not.

Should the United States go to war with Iran? Probably not.

Now that that’s out of the way, we can unpack the current tensions with Iran, where they are likely to lead, and the potential pitfalls the United States should avoid on the road ahead.

It is unlikely that we will find ourselves in a war with Iran in the near term because both sides are eager to avoid one. Although some of President Trump’s advisors may welcome a clash with Tehran, he has consistently made clear that he wants to end American wars in the Middle East, not start new ones. That has been behind his impetus to pull US troops out of Syria and his unwillingness to become further involved in the Yemeni civil war.

On the other side of the Persian Gulf, Ayatollah Ali Khamene’i, Iran’s Supreme Leader announced that there would be no war. In case you don’t believe him, the Iranians have typically shown enormous respect for American conventional military power since they were shellacked by it in the late 1980s. They know full well that in a full-on war, the US would do tremendous damage to Iran’s armed forces and could threaten the regime’s grip on power – which is the very thing they are seeking to avoid.

Of course, just because two countries don’t want a war doesn’t mean that they won’t stumble into one anyway. Given the current tensions created by the American pressure on Iran and Tehran’s nascent efforts to push back, the deployment of additional American military forces to the region, and the tendency for Iran’s Revolutionary Guards to occasionally take unauthorized aggressive actions, no one should rule out an unintended clash. Even then, however, the most likely scenario would be a limited American retaliatory strike to demonstrate to Iran that Washington won’t be pushed around by a 98-pound weakling and that Tehran needs to keep its problem children under control.

#### Deterrence and conflict aversion both outweigh miscalc.

Horowitz & Saunders 19 Michael C. Horowitz, Political Science Professor at the University of Pennsylvania, & Elizabeth N. Saunders, Security Studies Professor at Georgetown University. [War with Iran is probably less likely than you think, the Washington Post, 6-17-19, https://www.washingtonpost.com/politics/2019/06/17/war-with-iran-is-probably-less-likely-than-you-think/]

Misperception rarely causes war. The spiral model may not be the right way to think about how conflicts escalate. Missed signals and miscalculation can indeed generate tension. But leaders have many ways to avoid conflicts that they do not want to fight. The historical record suggests that misperception and accidental escalation rarely lead to war — as Dan Reiter noted here at TMC during the height of North Korea tensions in 2018. Domestic political pressures don’t seem to be pushing toward war. The United States and Iran also face domestic pressures that may make both sides hesitate before escalating. Iran’s economy has suffered under the Trump administration’s renewed sanctions, and parliamentary elections are coming up. Although the country’s president, Hassan Rouhani, has used tough rhetoric recently, a costly war might not benefit Iran’s leaders, since it could inflict further economic and human costs, or even lead to regime change or collapse. Likewise, after nearly two decades of war in the Middle East and Afghanistan, Americans are unlikely to welcome another major conflict. Neither Trump’s own party nor the opposition Democrats has rallied the U.S. public to pressure Trump to escalate. As TMC’s Michael Tesler noted in December, although Trump’s base supporters tend to have hawkish views, they supported his decision to withdraw troops from Syria. If Trump does not want war with Iran, his base would likely follow. The president doesn’t seem eager for war. There has been much talk about a replay of the Iraq War, with the United States using possibly flawed intelligence to justify war. But although Trump has used limited military force in Syria, he seems generally opposed to costly wars in the Middle East, and unlikely to embrace a new one. Both Pompeo and national security adviser John Bolton are much more hawkish on Iran, but Trump has distanced himself from his advisers’ hawkish rhetoric, particularly the most costly option: regime change. [Designating an Iranian military unit a terrorist organization will make relations with Iran more difficult. Here's how.] Here’s what to watch for. So which will win out: the risks of escalation or the pressures for restraint? Amid all the tension, Iran wants its regime to survive, and Trump probably does not want to absorb a costly war. In the coming days and weeks, it will be telling to see if there is further daylight between Trump and his advisers. Here’s one more risk: if Trump’s hawkish advisers present an option that seems like it could be kept limited, but actually carries a strong likelihood of escalation. Trump has embraced limited displays of force, such as airstrikes in Syria in 2017 and 2018, and he issued a threatening tweet on Iran in May. But he has also pivoted away quickly from harsh rhetoric to diplomacy before — as he did toward North Korea — and has already achieved his campaign goal of pulling out of the nuclear deal he disdained. [Would Iran welcome a new nuclear deal? Think again.] The bottom line: Despite rising tension, powerful factors reduce the likelihood of war between the U.S. and Iran. That’s unlikely to change anytime soon.

#### The threat is predictable, which minimizes the chance of war.

Hermann 19 Dr Rainer Hermann, an MA in economics and a PhD in Middle Eastern Studies. [Opinion: US-Iran escalation a threat, but war unlikely, 5-12-19, https://www.dw.com/cda/en/opinion-us-iran-escalation-a-threat-but-war-unlikely/a-48709624]

Chances of war between the US and Iran are low, despite the fact that Washington has sent a carrier group to the Persian Gulf, and that Tehran has given European partners 60 days to save the nuclear deal. Sure, tensions between the two countries are mounting, but the naval hardware that was already on its way to the Indian Ocean only to be redirected to the Gulf is not enough for a major operation. At the same time, Iran is sticking to its desire to negotiate. It's likely Iran's President Hassan Rouhani will grant an extension to his 60-day ultimatum. Neither side wants war Taking both sides' interests into account, war seems even less probable. US President Donald Trump has tied himself to a promise of bringing home US troops from the Middle East. It seems he has learned from his predecessors and isn't ready to oversee a new war that has no clear exit without sustaining major losses. That's why he has stuck to a strategy of threats — at times excessive ones — as a means of getting Iran to take his "deal." Read more: A desperate move by Iran's Rouhani Meanwhile, Iran is not an adventurous country. Its foreign and security policies are predictable, even if often diametrical to Western interests. Iran responds to its opponents' weaknesses, such as in the Arab world, and strengths, such as American pressure. At most, Tehran is ready for a calculated escalation. Its position in the current conflict is one of weakness: American forces best Iranian ones, and its economy is in the basement.

## Trade Mines Answers

### No Food Wars

#### No food wars impact.

Steven **Pinker 11**, Prof @ Harvard, Steven Pinker: Resource Scarcity Doesn’t Cause Wars, <http://www.globalwarming.org/2011/11/28/steven-pinker-resource-scarcity-doesnt-cause-wars/>

Once again it seems to me that the appropriate response is “maybe, but maybe not.” Though climate change can cause plenty of misery… it will not necessarily lead to armed conflict. The political scientists who track war and peace, such as Halvard Buhaug, Idean Salehyan, Ole Theisen, and Nils Gleditsch, are skeptical of the popular idea that people fight wars over scarce resources. Hunger and resource shortages are tragically common in sub-Saharan countries such as Malawi, Zambia, and Tanzania, but wars involving them are not. Hurricanes, floods, droughts, and tsunamis (such as the disastrous one in the Indian Ocean in 2004) do not generally lead to conflict. The American dust bowl in the 1930s, to take another example, caused plenty of deprivation but no civil war. And while temperatures have been rising steadily in Africa during the past fifteen years, civil wars and war deaths have been falling. Pressures on access to land and water can certainly cause local skirmishes, but a genuine war requires that hostile forces be organized and armed, and that depends more on the influence of bad governments, closed economies, and militant ideologies than on the sheer availability of land and water. Certainly any connection to terrorism is in the imagination of the terror warriors: terrorists tend to be underemployed lower-middle-class men, not subsistence farmers. As for genocide, the Sudanese government finds it convenient to blame violence in Darfur on desertification, distracting the world from its own role in tolerating or encouraging the ethnic cleansing. In a regression analysis on armed conflicts from 1980 to 1992, Theisen found that conflict was more likely if a country was poor, populous, politically unstable, and abundant in oil, but not if it had suffered from droughts, water shortages, or mild land degradation. (Severe land degradation did have a small effect.) Reviewing analyses that examined a large number (N) of countries rather than cherry-picking one or toe, he concluded, “Those who foresee doom, because of the relationship between resource scarcity and violent internal conflict, have very little support from the large-N literature.”

#### The countries that matter will solve escalation with institutions.

Sarah **Cliffe 16**, Director of the Center on International Cooperation at New York University, 3/29/16, “Food Security, Nutrition, and Peace,” http://cic.nyu.edu/news\_commentary/food-security-nutrition-and-peace

However, current research **does not** yet indicate a clear link between climate change, food insecurity and conflict, except perhaps where rapidly deteriorating water availability cuts across existing tensions and weak institutions. But a series of interlinked problems – changing global patterns of consumption of energy and scarce resources, increasing demands for food imports (which draw on land, water, and energy inputs) can create pressure on fragile situations. Food security – and food prices – are a highly political issue, being a very immediate and visible source of popular welfare or popular uncertainty. But their **link to conflict** (and the wider links between climate change and conflict) is indirect rather than direct. What makes some countries more resilient than others? **Many** countries face food price or natural resource shocks **without falling into conflict**. Essentially, the two important factors in determining their resilience are: First, whether food insecurity is combined with **other stresses** – issues such as unemployment, but most fundamentally issues such as political exclusion or human rights abuses. We sometimes read nowadays that the 2006-2009 drought was a factor in the Syrian conflict, by driving rural-urban migration that caused societal stresses. It may of course have been one factor amongst many but it would be **too simplistic** to suggest that it was the primary driver of the Syrian conflict. Second, whether countries have strong enough institutions to fulfill a social compact with their citizens, providing help quickly to citizens affected by food insecurity, with or without international assistance. During the 2007-2008 food crisis, developing countries with low institutional strength experienced more food price protests than those with higher institutional strengths, and more than half these protests turned violent. This for example, is the difference in the events in Haiti versus those in Mexico **or the Philippines** where far greater institutional strength existed to deal with the food price shocks and **protests did not spur deteriorat**ing **national security** or widespread violence.

#### No correlation between food shortages and conflict—other factors

Buhaug et al 15 [Halvard Buhaug, Peace Research Institute in Oslo an Norwegian University of Science and Technology. Tor Benjaminsen, Espen Sjaastad, Ole Magnus Theisen.] “Climate variability, food production shocks, and violent conflict in Sub-Saharan Africa” Environmental Research Letters, Volume 10, Number 12 (http://iopscience.iop.org/article/10.1088/1748-9326/10/12/125015) - MZhu

Across all models, we find relatively weak and insignificant effects for domestic food production and we also note that the sign of the coefficients shifts between outcome types. In this sense, table 1 implicitly contrasts both claims that political violence is more prevalent when basic needs are met (Salehyan and Hendrix 2014) and claims that agricultural income shocks increase civil conflict risk (von Uexkull 2014). The results are consistent with Koubi et al (2012) and van Weezel (2015), however, who conclude that rainfall—a significant determinant of yields in SSA—has little impact on conflict either directly or through economic performance.

The covariate that best and most consistently explains temporal variation in political violence is the time-lagged conflict incidence indicator. Models 1–2 show that a new civil conflict is unlikely to break out if another one is already ongoing in the same country whereas Models 3–6, which capture the occurrence of less organized conflict, demonstrate that violence begets violence. Coups d'état (Models 7–8) exhibit a comparatively weak temporal correlation pattern in our data and are generally regarded as a highly unpredictable phenomenon (Luttwak 1979).

Next, we estimate the same set of models on a subsample of 14 countries in SSA where rainfall has a large and significant positive effect on food production (figure 2(b); see supplementary information, section B for details). To better capture the influence of climate variability and reduce concerns with endogeneity, we further replace the standard OLS model with two-stage instrumental variable regression. The first stage in this model estimates the joint influence of annual rainfall (linear and squared terms) and temperature (linear) on contemporaneous food production. This effect then constitutes the exogenous instrument for food production in the second stage. The results are reported in table 2. Mirroring the results presented above, we fail to uncover a robust signal for agricultural performance, although the sign of the coefficient for food production now remains negative in seven of the eight specifications.

Food production shocks may have different consequences depending on the socioeconomic context, so next we consider a series of interactive relationships. Specifically, we investigate the joint effect of food production and (i) low level of development, (ii) extent of discriminatory political system, and (iii) economic dependence on agriculture; three conditions whereby loss of income from agriculture might constitute a particular challenge to society. To model these interactions, we include time-varying regressors instead of country-fixed effects where (i) is represented by infant mortality rate (IMR; World Bank 2014), (ii) is captured using the Ethnic Power Relations v.1.1 data (Cederman et al 2010), while (iii) uses an index of agricultural contribution to GDP (World Bank 2014). Moreover, to preserve focus on temporal dynamics, food production is now operationalized as yearly deviation from the country mean, 1961–2009. We use additive inverse deviation values to ensure theoretical consistency among the components in the interaction terms. All models control for (ln) population size, conflict history, and a common time trend, and models without IMR and agricultural dependence additionally control for (ln) GDP per capita. The results are presented in table 3.

Again, we are unsuccessful in establishing a consistent covariation pattern between agricultural performance and political violence. Interpreting the combined effect of interaction terms with continuous parameters is inherently difficult but figure 4 shows that food production is insignificantly related to all conflict outcomes across levels of socioeconomic development for all three interaction terms. The sole exception is the result in Model 24, where lower food production in highly discriminatory societies is negatively associated with non-state conflict. This result would seem to contradict the standard scarcity thesis (Homer-Dixon 1999) although it is consistent with observations that conflict is more prevalent during surplus years (Witsenburg and Adano 2009, Salehyan and Hendrix 2014).

Mirroring earlier research, ethnopolitical exclusion is strongly related to higher civil conflict risk, but not necessarily to other forms of political violence. Infant mortality rate and economic dependence on agriculture appear largely irrelevant. While this may come as a surprise, recall that most countries in SSA are characterized by underdevelopment and a large agricultural sector, implying that the variation in values on these indicators is modest.

Large parameter uncertainties and p-values above the conventional significance threshold (5%) may disguise substantively important effects (Ward et al 2010). Accordingly, as a final assessment, we conduct a set of out-of-sample simulations and compare predictions for models with and without food production. The models are estimated on a subset of the full sample, in this case all years before 2000, and the estimated effects are then used to predict conflict outcomes out of sample, i.e., the 2000–09 period. Figure 5 shows the predicted values from four pairs of models that are specified similarly to Models 17, 20, 23, and 26, except for the shorter time period and the fact that one model in each pair drops the food production deviation variable. For civil conflict and social unrest, the models generate very similar predictions, signaling that agricultural performance adds little to the models' predictive power. There is more spread in the predictions for the remaining two outcome categories. Puzzlingly, the model without food production performs better in both cases—i.e., the Receiver Operating Characteristics curves have higher 'Area Under the Curve' scores. We hesitate to put too much emphasis on the ROC tests, given the rareness of the outcomes (notably Models 17 and 26) and the relatively small training samples (Models 20 and 23), but nonetheless the patterns observed in the out-of-sample simulations substantiate the regression results reported above; fluctuations in agricultural output explain little of the observed variation in political violence in post-colonial Sub-Saharan Africa.

5. Concluding remarks

Emerging evidence suggests that food price shocks are associated with an increase in social unrest (Smith 2014, Bellemare 2015, Hendrix and Haggard 2015, Weinberg and Bakker 2015). Yet, the robust 'non-finding' presented here implies that so-called 'food riots' play out largely isolated from climate-sensitive production dynamics in the affected countries. Likewise, claims that adverse weather and harvest failure drive contemporary violence in Africa (e.g., Hsiang et al 2013, IFPRI 2015) are not supported by our analysis. Instead, social protest and rebellion during times of food price spikes may be better understood as reactions to poor and unjust government policies, corruption, repression, and market failure (e.g., Bush 2010, Buhaug and Urdal 2013, Sneyd et al 2013, Chenoweth and Ulfelder 2015).

#### Food prices don’t cause conflict---reject their bad studies.

Demarest 15—PhD Researcher at the Centre for Research on Peace and Development [Leila, “Food price rises and political instability: Problematizing a complex relationship,” The European Journal of Development Research, Vol. 27, No. 5, p. 650-671, Emory Libraries]

6. Conclusions and Way Forward

While some progress has been made in improving our understanding of the linkages between rising food prices and conflict, several important gaps remain. Firstly, notions of conflict and political instability are often used interchangeably, while these concepts and the relationships between them remain to some extent vague. The ‘food riot’ concept in particular leads to confusion. Although it is popularly seen as a violent rise of the masses, in reality, many peaceful events are gathered under this term, while violence is often committed by the state rather than by hungry consumers. The term also presupposes that food is the central issue at hand, which does not necessarily have to be the case. Many misunderstanding arise from the second gap identified in this paper: the uncritical data gathering based on international news reports. Not only are these remarkably inconsistent, they also make use of classifications which are not scientifically investigated. Finally, causal mechanisms in the relationship between rising food prices and conflict often remain assumptions in the literature and lack empirical foundation. Three crosscutting avenues for improvement therefore exist: better concept definitions, better data gathering, and more focus on contexts.

Clearly defined concepts and categorizations of conflict and instability are a necessary foundation for research on the linkages between rising food prices and conflict. For (food) protests in particular, purposeful categorizations require an enhanced insight in the events that took place on the ground. Local news sources for data gathering can prove to be more reliable than Western (English) media to accomplish this. Event descriptions are also likely to be more detailed in local sources, which allows for a first-hand qualitative analysis of causes and context.

As international food prices are likely to remain high, improving our understanding of the causal mechanisms which can lead to conflict remains crucial. We can draw important lessons from the literature on poverty and conflict, resource scarcity and conflict, and regime transition in Africa. The causal role of economic factors alone has continuously been questioned, and ‘context’ or prevailing political, economic, and social factors play a crucial role in the conflict outcome. The argument that adverse economic shocks seem more of a trigger to conflict rather than an important cause is not particularly remarkable in itself. Yet while many authors acknowledge this, the focus often remains on the trigger. Resource scarcity, climate change, population growth, or food insecurity often remain the starting point of analyses, with researchers consequently tracing the divergent (theoretical) possibilities for conflict. In the end, most admit that these factors do not automatically lead to conflict everywhere, and stress the importance of context. Because the theoretical possibilities for conflict are so large, however, the context factor remains rather understudied with as most agreed upon notions that elements of ‘grievance’ and ‘collective action’ are required.

It is hence important to focus more on the ‘contexts’ that can lead to conflict and, in doing so, to make the distinction between different forms of conflict. This also implies a data collection exercise. Contextual data are currently collected at the aggregate, national level, and only on a yearly basis, which can lead to spurious relations. While the use of these variables is increasingly questioned in civil war studies, we can also doubt their strength in the study of highly localized, one-time events such as riots. I particularly make the case for ‘bringing politics back in’. The policies taken by the government are crucial in the violent escalation of social conflict (e.g. accommodation versus repression), but the only variable currently in use to explain state behaviour seems to be the country-level regime type variable (Polity IV or Freedom House), which is also used with regards to highly localized conflicts. Other ways in which politics matter, can be the strength of the political opposition. The Muslim Brotherhood in Egypt, for example, was probably better organized than other opposition groups to make use of economic unrest.

## Accidents Answers

### No SCS Esc --- 1NC

#### China won’t escalate SCS disputes—they don’t want to provoke American hawks

Wendy Wu & Minnie Chan ‘20 Wendy Wu is a Beijing-based reporter focusing on international finance and diplomacy. Minnie Chan is an award-winning journalist, specializing in reporting on defence and diplomacy in China. "Chinese military told not to fire first shot in stand-off with US". South China Morning Post. 08-11-2020. <https://www.scmp.com/news/china/diplomacy/article/3096978/south-china-sea-chinese-military-told-not-fire-first-shot>

China has told its service personnel “not to fire the first shot” as Beijing looks to de-escalate tensions with the United States in the South China Sea, sources familiar with the situation told the South China Morning Post. Both sides have stepped up their operations in the disputed waters, increasing the risk of incidents that spiral out of control, but Beijing does not want to give American hawks the opportunity to escalate things further. The sources said Beijing had ordered pilots and naval officers to exercise restraint in the increasingly frequent stand-offs with US planes and warships. Meanwhile, further details have emerged about a phone conversation between the two countries’ defence ministers last week. The call was first suggested by the US side about “a month earlier” but was initially given a frosty reception in Beijing. But a source said the Chinese leadership later had a change of heart and decided to reach out as tensions escalated in the South and East China seas. Last month, the US deployed two aircraft carrier battle groups, the USS Nimitz and USS Ronald Reagan, for drills near Chinese waters and has also carried out rare nighttime aerial reconnaissance missions close to Guangdong and Fujian provinces in recent weeks. China has also conducted naval drills and flyover missions around Taiwan and the South China Sea. Despite tough public language dismissing the US carrier strike groups as “paper tigers”, sources said the PLA was wary of accidental clashes. One source close to the military also said Beijing had communicated through “various channels” to the US that it had told its military “never to fire first” in a goodwill gesture to keep the situation under control. “It’s easy to give the order to shoot, but neither China nor the US is able to control the consequences. The current situation is highly tense and very dangerous,” the person said. He said the PLA was a “different military force” from 2001 – a reference to the Hainan incident when a US intelligence aircraft collided with a PLA fighter jet. The Chinese pilot Wang Wei was killed and the US plane was forced to land on Hainan island. The crewmen were eventually released after the US issued a carefully worded statement on the incident. “Today, the PLA has developed many countermeasures. The Americans won’t be able to return in one piece if such an accident ever happens again,” he said. “But we are very clear that we will respond with force only as the last resort, when everything else has failed.” Another source said the two sides had established protocols to handle military encounters but these arrangements needed to be updated to reflect the latest situation. The source did not elaborate on whether this was discussed by the two defence ministers, Mark Esper and Wei Fenghe, in their August 6 conversation. China and the US established the military maritime consultative agreement in 1998 to avoid accidents during close encounters. In 2014 they agreed on an initiative to notify each other of major military operations and a code of conduct for naval and military encounters. But in recent years the relationship between the two countries has steadily worsened. US Secretary of State Mike Pompeo has become increasingly belligerent in his rhetoric against China, taking aim directly at the Communist Party and declaring that the policy of engagement with China was “a failure”. Apart from increasing its operations in the South China Sea, the US has also rejected China’s sweeping claims in the disputed waters, saying they were “unlawful” and threatened the freedom of navigation. Meanwhile, the Chinese leadership has become increasingly concerned about security, with President Xi Jinping telling the Politburo late last month that “uncertain and unstable factors” were an increasing threat. But in recent weeks, senior Chinese diplomats have subtly changed their combative tone and called for dialogue to contain risks. Foreign Minister Wang Yi also picked up a more conciliatory approach when discussing the South China Sea in an interview with the state news agency Xinhua last week. Wang did not mention the “nine-dash line”, which marks out China’s claims over 90 per cent of the disputed waters. Instead he said the South China Sea wass “the shared home for the countries in the region” but should not be “a wrestling ground for international politics”. But Wang said the US had breached its commitment not to take sides in Beijing’s dispute with the other South China Sea claimants and accused it of seeking to drive a wedge between China and the Association of Southeast Asian Nations. On Monday the foreign ministry in Beijing called for “candid and effective dialogue” to control conflicts, but said it would firmly defend the nation’s sovereignty and territorial integrity.

### No Sub-Bumping --- 1NC

#### No sub-bumping miscalc

Miasnikov 2003 --- Eugene Miasnikov, Ph.D, Aerophysics and Space Research of Moscow Institute of Physics and Technology https://www.armscontrol.ru/eugene/e-pubs.htm

Is there a risk that submarine collisions might actually trigger an inadvertent missile launch, or create the situation for an unanticipated escalation to genuine attack? I do not think so. There is a certain set of conditions which are necessary to launch SLBMs. In particular, a missile submarine has to receive a launch order and permitting codes, which unlock targeting information, from a ground command center. Unlike U.S. SSBNs, Russian missile submarines can not launch missiles without such an order.

### No Sub-Bumping --- 2NC

#### No sub bumping impact.

CACEE ’3. [Center for Arms Control, Energy and Environmental Studies at MIPT; 8-21-2003, “Preventing Submarine Collisions: Answers to the questions of U.S. nationwide policy debaters,”. https://www.armscontrol.ru/subs/collisions/debates.htm]

Part 1. Q: A team from Lexington High School in Massachusetts proposes that: "The U.S. should establish a blueprint amending current Navy protocols to preclude the tracking of Russian submarines in Russian territorial waters and necessary patrol routes." They cite your article, Collision of Two U.S. Nuclear Powered Submarines on March 1998, Our Comment as evidence supporting the passage of their policy proposal. They claim that tracking risks reactor accidents below the water and crisis escalation when a Russian sub commander launches a SLBM in response to U.S. sub bumping. What are the chances of a nuclear accident as a result from a crash? The danger of a collision is conventional explosion which results in break up of submarine nuclear reactors, and possibly nuclear warheads of the missiles, so that highly radioactive nuclear materials (nuclear weapons and nuclear fuel in submarine reactors) will be released and spread over the wide area - pretty much like what happened in Chernobyl. If there will be a strong wind toward the coast, the radioactive waste can spread deep inside the territory as well. Submarine collisions are dangerous, because they may also lead to loss of personnel and submarines. For example, in March 1993 a U.S. submarine collided with a Delta IV Class Russian submarine at the Barents Sea causing very heavy damage to the front area of the Russian submarine's hull, and also considerable damage to the front of the U.S. submarine as well (the SSN Grayling). Since the Russian missile carrying submarine was moving forward in the water when the collision occurred, had the collision happened ten to twenty seconds later, it could have resulted in the crushing of one or more of the submarine's missile compartments. Such a collision could have caused a deflagration event that could have resulted in the loss of the Russian submarine, and possibly the U.S. submarine as well. Q: Also would a nuclear accident, perhaps 3-4 nuclear accidents lead to the extinction of all life in the oceans? It seems a little crazy that this could happen but the way that most teams are winning is by claiming a crash could end all aquatic life. This statement is a little bit exaggerated. Atomic bombs destroyed both Hiroshima and Nagasaki, killed more than 200,000 people, but there was also many people who survived. Chernobyl accident inflicted a severe damage, however the whole life did not end. The danger of an accident involving nuclear materials is that it effects a very large territory and rehabilitation of the damaged territory will take hundreds years. Nuclear submarine accidents may result in release of highly radioactive and toxic materials, which are dangerous to both humans and marine life. Some species may not be preserved. There is an extensive literature on biological effects of radioactivity. You may find appropriate information in "The Effects of Nuclear Weapons" by Glasstone or in "Environmental Impact Statements on Disposal of Nuclear Submarines", produced by the U.S. Navy. Q: Has there ever been a sub accident that resulted in radioactive material spilling into the ocean? Fortunately, submarine reactors were shut down in all known accidents. There was some release of radioactivity and presumably highly radioactive wastes (like water in the coolant system). The sank submarines contained nuclear weapons on board that might have been damaged. For example, there were reports about damage of casings of plutonium tipped torpedoes aboard Soviet Mike class SSN which sank in 1989 in Norwegian Sea. Plutonium leakage is now an issue of great concern of environmentalists. Q: The Chicago Tribune from June 23, 1997 reports that a 1986 collision off of Bermuda either directly or indirectly caused the inadvertent launch of a Soviet nuclear missile... In fact there was explosion, not an inadvertent launch of a SS-N-6 missile. The fact of collision has not been proven, however there is an evidence, which supports such a hypothesis. Q:..., but the book "Hostile Waters" says that they just blew the missile hatch... The book is more reliable, because one of its authors was aboard the Yankee SSBN which sank. Q:...Is there a risk that submarine collisions might actually trigger an inadvertent missile launch, or create the situation for an unanticipated escalation to genuine attack? I do not think so. There is a certain set of conditions which are necessary to launch SLBMs. In particular, a missile submarine has to receive a launch order and permitting codes, which unlock targeting information, from a ground command center. Unlike U.S. SSBNs, Russian missile submarines can not launch missiles without such an order. Q: What is required in order for an Russian nuclear sub commander to launch his missiles? On american subs it requires the captains and the executive officers keys to unlock the firing button. What is it on Russian subs? It is impossible to give a correct answer to this question, because this is a classified information. I have seen speculations on the matter in open literature, which look quite plausible. For example, you may find some information in books written by Bruce Blair: "Global Zero Alert for Nuclear Forces" and "Logic of Accidental Nuclear War". What is important to understand, the Russian command-and-control system designed in such a way, that neither a group of "crazy submariners", nor of terrorists (not speaking about a single "berserk") can technically deliver a nuclear-tipped ballistic missile at a chosen target and explode the nuclear warhead. Even if they manage to launch an SLBM, it will be self-destructed, because of the lack of the flight mission or the latter is not confirmed from the central command center. Q: It seems that crashes have decreased since the end of the Cold War. If you speak about collisions between U.S. and Russian subs, in fact, the most recent events happened in 1992 and 1993, after the end of the Cold War. Open sources list approximately a dozen of sub-to-sub collisions in total since mid 60-s. On one hand, deployment rate of Russian submarines drastically decreased, which diminishes probability of a collision. However, Russian subs became less noisy, and this fact has an adverse effect on the chances to collide with U.S. subs attempting to trail.

### No Accid War w/Russia

#### No miscalc-induced US-Russia war---existing CBMs solve

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As we are all well aware, the original Cold War, which officially ended 30 years ago last month, featured a number of close calls that almost turned it into a hot war. Thankfully, neither the Cuban Missile Crisis of 1962 nor the Able Archer exercise of 1983 (nor any other perilous incidents), led to a war between Washington and Moscow. More recently, however, respected statesmen have again begun to sound alarms. “Not since the 1962 Cuban Missile Crisis has the risk of a U.S.-Russian confrontation involving the use of nuclear weapons been as high as it is today,” former U.S. Energy Secretary Ernest Moniz and former U.S. Sen. Sam Nunn warned in a recent article in Foreign Affairs. I have expressed some doubts about this proposition, but it is nevertheless worth asking what it is—other than the fear of mutually assured destruction—that keeps the U.S. and Russia from stumbling into a war today or tomorrow. Part of the answer lies in the bilateral and multilateral agreements specifically designed to prevent incidents that could escalate into a war. As is clear from the list below, there are at least half a dozen bilateral agreements between Moscow and Washington that have been concluded for the purposes of preventing dangerous military incidents. These deals include the 1972 U.S.-Soviet agreement on prevention of incidents on and over the high seas and the 1989 U.S.-Soviet agreement on prevention of dangerous military activities. Some other NATO members—including the United Kingdom, Germany, France, Italy, Norway, Spain, the Netherlands, Canada, Greece and Portugal—have agreements with Russia on prevention of incidents on the high seas that are similar to the 1972 agreement between Moscow and Washington, while Canada and Greece also have agreements with Russia on prevention of dangerous military activities. However, almost a dozen NATO members have no such agreements with Russia, even though they abut seas. These countries include Albania, Bulgaria, Croatia, Latvia, Lithuania, Romania and Slovenia. Nor are there any multilateral NATO-Russia (or NATO-Collective Security Treaty Organization) agreements on prevention of dangerous military incidents, though a NATO-Russia Memorandum of Understanding on avoiding and managing such incidents has been discussed in Track II. The U.S. and its NATO allies should consider forming a unified position and approach Russia about formal negotiations on how some of the existing U.S.-Russian agreements on avoiding incidents could be multilaterized, shifting from a bilateral format to a multilateral NATO-Russia format. In particular, NATO and Russia should also discuss multilaterizing the 1989 U.S.-Soviet agreement on prevention of dangerous military activities. NATO and Russia could discuss including concrete mechanisms on actual prevention of incidents in such existing multilateral agreements as the 2011 Vienna Document and the Convention on International Civil Aviation, including, perhaps, a requirement for warplanes to fly with their transponders turned on at all times while in international airspace.1 The U.S. and its NATO allies should also, of course, discuss how to save the Open Skies Treaty of 1992. In addition to enhancing the legal framework for prevention of incidents, Russian and Western leaders should also make sure their military commanders do not take unauthorized actions that increase the risk of an accident that could unintentionally lead to a conflict. There have been quite a few instances when the U.S. and Russian militaries have accused each other of unsafe behavior during one and the same encounter. For instance, in June 2019 the U.S. Navy accused the Russian Navy’s Admiral Vinogradov anti-submarine destroyer of “maneuver[ing] from behind and to the right of [U.S. missile cruiser] Chancellorsville, accelerat[ing] and clos[ing] to an unsafe distance" as the U.S. warship was recovering a helicopter within 50 meters of the Russian ship in the Philippine Sea. The Russian Navy in turn accused the Chancellorsville of unsafe maneuvers, saying this cruiser crossed the Russian destroyer’s path and then abruptly changed direction. Earlier, Russian President Vladimir Putin had commented on risk-taking by his senior military officials after Russia’s taking of Crimea: In a documentary-style film about those events, which aired on Russian state television in March 2015, the then commander of Russia’s Black Sea Fleet, Alexander Vitko, describes how a Su-24 attack plane was sent to fly low over the deck of the USS Donald Cook in April 2014: “It was decided to show use and resolve to use force.” When the documentary’s creator Andrei Kondrashov asks Putin to comment, the Russian president says: “It was not my decision. It was hooliganism on their [the commanders’] part and they didn’t even tell me anything about it.” Last but not least, the sides should discuss how to prevent incidents in one domain that did not exist during the original Cold War. That domain is cyber and it is essential that the U.S. and Russia, which both now have cyber troops, and their allies discuss how to prevent incidents in that domain that could ultimately lead to an accidental war. In doing so they could take a cue from various sources, among them the aforementioned U.S.-Soviet agreement on prevention of dangerous military activities of 1989, which warns against “interfering with command and control networks in a manner which could cause harm to personnel or damage to equipment of the armed forces of the other Party.” A new Cold War may indeed be inevitable. Some say it has already started. However, that doesn’t mean the U.S., its allies and Russia cannot jointly work to reduce grave but common risks potentially posed by unintended military incidents. I. Agreements on prevention of military incidents and accidents I.A. Bilateral U.S.-Russian agreements on prevention of military incidents and accidents I.A.1. U.S.-Soviet Memorandum of Understanding Regarding the Establishment of a Direct Communications Link of 1963 Contents: At the Pentagon, the hotline system is located at the National Military Command Center. The hotline was first used by the United States and Russia in 1967 during the Six-Day War. Meant to avoid war, but U.S. President Barack Obama used it in October 2016 to warn Putin against using hackers to disrupt the U.S. election. Operational status: Remains in force. I.A.2. U.S.-Soviet Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War (Accidents Measures) of 1971 Contents includes: A pledge by each party to take measures each considers necessary to maintain and improve its organizational and technical safeguards against accidental or unauthorized use of nuclear weapons; Arrangements for immediate notification should a risk of nuclear war arise from such incidents, from detection of unidentified objects on early warning systems or from any accidental, unauthorized or other unexplained incident involving a possible detonation of a nuclear weapon; and Advance notification of any planned missile launches beyond the territory of the launching party and in the direction of the other party. Operational status: Remains in force. I.A.3. U.S.-Soviet Agreement on Prevention of Incidents on and over the High Seas of 1972 Contents: Not interfering in the "formations" of the other party; Avoiding maneuvers in areas of heavy sea traffic; Requiring surveillance ships to maintain a safe distance from the object of investigation so as to avoid "embarrassing or endangering the ships under surveillance"; Using accepted international signals when ships maneuver near one another; Not simulating attacks at, launching objects toward or illuminating the bridges of the other party’s ships; Informing vessels when submarines are exercising near them; Requiring aircraft commanders to use the greatest caution and prudence in approaching aircraft and ships of the other party. Operational status: Remains in force. I.A.4. U.S.-Soviet Agreement on the Prevention of Nuclear War of 1973 Contents: the signatories agree “[T]hat an objective of their policies is to remove the danger of nuclear war and of the use of nuclear weapons.” That they “will refrain from the threat or use of force against” each other. That “if at any time relations … involve the risk of a nuclear conflict," then they "will immediately enter into urgent consultations with each other and make every effort to avert this risk." Operational status: Remains in force, “of unlimited duration.” I.A.5. U.S.-Soviet agreement on prevention of dangerous military activities of 1989 Contents: “Each Party shall take necessary measures directed toward preventing dangerous military activities, which are the following activities of personnel and equipment of its armed forces when operating in proximity to personnel and equipment of the armed forces of the other Party during peacetime: “Entering by personnel and equipment of the armed forces of one Party into the national territory of the other Party owing to circumstance brought about by force majeure, or as a result of unintentional actions by such personnel … “Interfering with command and control networks in a manner which could cause harm to personnel or damage to equipment of the armed forces of the other Party. “Hampering the activities of the personnel and equipment of the armed forces of the other Party in a Special Caution Area2 in a manner which could cause harm to personnel or damage to equipment;” The agreement covers not only personnel but also “any ship, aircraft or ground hardware of the armed forces of the Parties.” Operational status: Remains in force. I.A.6. Moscow Declaration by U.S. President Bill Clinton and Russian President Boris Yeltsin of 1994 Contents: “The presidents announced that they would direct the detargeting of strategic nuclear missiles under their respective commands so that by not later than May 30, 1994, those missiles will not be targeted. Thus, for the first time in nearly half a century—virtually since the dawn of the nuclear age—the United States and Russia will not operate nuclear forces, day-to-day, in a manner that presumes they are adversaries.” Operational status: Unclear. I.A.7. U.S.-Russia Memorandum on safety of fights in Syria of 2015 Contents: The memorandum contains specific protocols for air crews to follow to avoid an inadvertent clash over Syria, calling for U.S. and Russian aircraft to maintain a safe distance. The memorandum provided for creation of a ground communications link between the two sides in the event air communications fail, and the communications link was established. The memorandum also provided for formation of a working group to discuss any implementation issues. The U.S. has also told Russia where its special forces are in Syria so that Russia would not bomb them. Operational status: Remains in force. I.A.8. U.S.-Russian agreement of early November 2017 on dividing line in Syria. U.S. and Russian officers reportedly agreed on the Euphrates River as a dividing line in Syria and on a system of advance notifications prior to any river crossings. Operational status: Unclear. I.B. Multilateral agreements on prevention of military accidents and incidents I.B.1. International Regulations for Preventing Collisions at Sea of 1972 (both U.S. and Russia are signatories, as is China) Contents: Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision. Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions. Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. When two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other. When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel. A vessel restricted in her ability to maneuver when engaged in an operation for the maintenance of safety of navigation in a traffic separation scheme is exempted from complying with the Rule [on traffic separation schemes] to the extent necessary to carry out the operation. Operational status: Remains in force. I.B.2. Code for Unplanned Encounters at Sea of 2014 (signed by Australia, Brunei, Cambodia, Canada, Chile, China, France, Indonesia, Japan, Malaysia, New Zealand, Papua New Guinea, Peru, the Philippines, Russia, Singapore, South Korea, Thailand, Tonga, the United States and Vietnam at the Western Pacific Naval Symposium) Contents: Calls on naval warships and planes to maintain a safe separation between vessels. When conducting exercises with submarines, surface naval ships should consider the display of appropriate signals to indicate the presence of submarines. Naval ships should generally avoid the simulation of attacks, discharge of signal rockets and weapons, illumination of navigation bridges and aircraft cockpits, aerobatics and simulated attacks in the vicinity of ships encountered. Does not apply to coastguards. Operational status: Remains in force, but non-binding. II. Confidence-Building Measures II.A. Bilateral Confidence-Building Measures II.A.1. U.S.-Soviet Agreement on the Establishment of Nuclear Risk Reduction Centers of 1987 Contents: Each party agreed to establish a Nuclear Risk Reduction Center in its capital and to establish a special facsimile communications link between these centers. The centers are intended to supplement existing means of communication and provide direct, reliable, high-speed systems for the transmission of notifications and communications at the government-to-government level. The Nuclear Risk Reduction Centers do not replace normal diplomatic channels of communication or the "Hot Line," nor are they intended to have a crisis management role. Operational status: Remains in force. II.A.2. U.S.-Soviet Agreement on Notifications of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles (BML) of 1988 Contents: Provides for notification, no less than 24 hours in advance, of the planned date, launch area and area of impact for any launch of an ICBM or SLBM. The agreement also provides that these notifications be provided through the Nuclear Risk Reduction Centers. II.A.3. U.S.-Soviet Agreement on Reciprocal Advance Notification of Major Strategic Exercises (MSE) of 1989 Contents: The agreement provides for each party to give the other advance notification of one major strategic-forces exercise that includes the participation of heavy bombers each year. Operational status: Remains in force.

#### No U.S.-Russia accidents

Mel Deaile and Al Mauroni, 15 Dr. Mel Deaile and Al Mauroni work at the U.S. Air Force Center for Unconventional Weapons Studies,"The Need for Nuclear Alerts", warontherocks.com/2015/05/the-need-for-nuclear-alerts/

The Global Zero report states that the risk of the outbreak of nuclear conflict has not decreased proportionally with the significant reductions of nuclear weapons since the height of the Cold War. They insist that a “hair-trigger” alert could result in a nuclear exchange during this period of high acrimony on the international stage. By doing so, they ignore geopolitical context. While tensions between the United States and Russia are undoubtedly higher than we’d like, **we are not facing anything approaching the massive competition for global dominance** **that was the Cold War** and the tensions that came along with it. This argument and the others advanced by Global Zero commission reveal their effort as just another excuse for taking nuclear weapon systems offline. The Accident Red Herring Another Global Zero argument for eliminating the ICBMs and returning non-strategic nuclear weapons to the United States is that it would reduce nuclear incidents or accidents. (An accident would be an unexpected error due to a failure of procedures such as an unauthorized launch or the loss of a nuclear weapon. An incident would be an intentional hostile event involving a nuclear weapon, facility, or component.) This is a red herring. There have been32 known “broken arrows” (accidents involving nuclear weapons) in the history of nuclear operations. The majority of these accidents involved aircraft carrying nuclear weapons, and a majority of those occurred in the 1960s when Strategic Air Command was flying airborne alert. A significant accident happened in 1980 when a dropped wrench socket hit a fuel line that eventually caused a liquid-fueled rocket to explode and jettison the nuclear warhead some 600 feet downrange. Today’s nuclear weapons are **much more safe and secure** than during the Cold War. The U.S. nuclear arsenal has no liquid-fueled rockets (they are all solid fuel) and no bombers flying on alert loaded with nuclear bombs. Finally, those who would de-alert the nuclear force claim that the **slightest misinterpretation** **could lead to a nuclear exchange**. History refutes this claim as well. During the Cold War, bomber and reconnaissance aircraft **routinely penetrated the airspace of both sides**. This was a commonly-accepted practice to test resolve, prod air defenses, and to signal displeasure with current policy or practices. Even today, Russian bombers enter U.S. and European airspace and U.S. reconnaissance planes loiter on the boundaries of Russia. The United States sends its B-2 Spirit bombers to Europe and Southeast Asia to demonstrate political resolve. **It did not lead to nuclear war in the past and** it will not in the future, **because political and military leaders recognize this for what it is** — **strategic messaging**, not acts of war. During the early days of George W. Bush’s administration, a Chinese fighter aircraft ran into a U.S. reconnaissance aircraft forcing it to land on Hainan Island. While this was an international incident between two nuclear-weapon states, it did not lead to nuclear war or even a change in the nuclear posture of both countries. Additionally, previous misinterpretations of launches did not lead to a nuclear exchange because both sides understand the importance of strategic context. Some like to claim a false target on a radar screen, a fly landing on the scope, or some other fanciful scenario might happen that could cause an unauthorized nuclear first strike. The Dr. Strangelove scenario of a Gen. Jack Ripper launching the nuclear fleet on an attack to preserve the United States’ “purity of essence” makes for great entertainment but is hardly based on fact. As noted above, the president is the only person who can authorize a U.S. nuclear release **and constant communications** **between the** United States **and Russia** (**through the White House “hot line,” the Nuclear Risk Reduction Center, the State Department, and the United Nations**) work to prevent such scenarios. While the Cold War is over and tensions between the two sides have recently increased, **there is no current strategic context** under which either side would launch a bolt out of the blue. So does this mean nuclear weapons should be pulled off alert? Absolutely not. No one can forecast the future security environment of Russia and China. We are in a multipolar world in which nuclear weapon states other than Russia also pose an existential threat. It is because our nuclear forces are on alert that the United States **remains free from the threat of nuclear or WMD attack**. If there are people who cannot get out of the Cold War mentality of “Dr. Strangelove,” it is the Global Zero community and not the Air Force.

### No Miscalc War --- 1NC

#### Miscalc doesn’t cause conflict

Steven Stashwick, Lieutenant Commander in the U.S. Navy Reserve, completed graduate studies in international relations at the University of Chicago, “South China Sea: Conflict Escalation and ‘Miscalculation’ Myths”, Sept 25th 2015, <http://thediplomat.com/2015/09/south-china-sea-conflict-escalation-and-miscalculation-myths/>

This concern over local miscalculation nonetheless reflects a longstanding view of the danger “incidents at sea” poses to peace stretching back to the Cold War. Both U.S. and Soviet leaderships were concerned that an incident between “peppery young ship captains” could “lead people to shoot at each other with results that might…be impossible to control,” in the words of Admiral Elmo Zumwalt, U.S. Chief of Naval Operations in the 1970s. Back then, the U.S. and Soviets were openly adversarial and serious incidents between their ships and aircraft were almost commonplace. Yet despite explicit mutual, strategic, and existential antagonism between the U.S. and U.S.SR, none of the hundreds of maritime incidents that occurred over the four decades of the Cold War escalated into anything beyond a short diplomatic crisis. It is possible that they avoided a nuclear spiral in these incidents through diligent diplomacy and luck. But more likely, it suggests that this type of maritime incident is insufficient on its own to lead to the worst-case scenarios envisioned. Mitigating the miscalculation concerns of officials and the extreme scenarios of some commentators is that these maritime incidents do not occur in a vacuum, de-coupled from explicit national interests. In a famous 1988 Cold War incident, Soviet vessels in the Black Sea shouldered the U.S. warships Yorktown and Caron (a controlled collision meant to push a ship off-course) while the latter were deliberately contesting what the U.S. deemed excessive Soviet legal claims over maritime rights. The Soviets knew the U.S. vessels were there to intentionally flout their claims, and the U.S. knew the Soviets would likely try to enforce them. Even if the firmness of the Soviet response was unanticipated (or deemed unlikely), there was no mystery to either side’s objectives. Thus, neither side was going to start shooting in confusion; the Soviet vessels even radioed their intention to strike the U.S. ships. While not “safe” in the strictest sense (ships do not like to “swap paint” with each other), footage from the Yorktown and Caron being pushed shows the actions to be intense but deliberate, professionally executed, and clearly of an enforcement nature, rather than a prelude to combat. While a serious diplomatic incident, both sides understood the situation, which served to moderate concern over escalation. Similarly, a shouldering incident between the U.S. cruiser Cowpens and a Chinese warship in 2013, while concerning to the U.S. from a safety-at-sea perspective, was understood to be motivated by Chinese sensitivities around testing their new aircraft carrier, not a precursor to hostilities. Nonetheless, concerns over maritime incidents, miscalculation, and spiraling conflict contain enough intuitive logic to have endured. A shared Cold War concern over miscalculations led to accords that are still in effect, such as the Agreement on the Prevention of Incidents on and Over the High Seas (INCSEA) and Prevention of Dangerous Military Activities (DMA) agreement, and may be credited with helping keep incidents between the U.S. and U.S.SR under “control.” However, the fact that agreements were reached at all is likely more significant than their content. Such agreements indicated a shared belief between U.S. and Soviet military leaderships that despite their feverish preparations for war against one another, neither wanted war to come as the result of a tactical-level incident between individual ships and aircraft. This suggests neither would let an incident, however serious, become an independent casus belli. The substance of these accords (and those reached in the South China Sea) further strengthens this thesis. While INCSEA and DMA contained rules of behavior, these were, again in Zumwalt’s words, “little more than a reaffirmation of the [maritime] Rules of the Road” (international rules that direct how ships stay safe around each other at sea). What was groundbreaking was that in concluding the accords, the U.S. and U.S.SR implicitly recognized their intentions to violate those rules and practices when advantageous (consider the Yorktown and Caron). The accords created new parallel rules by which each could do so “safely,” as well as new communications protocols to inform one another of their intentions. Together, this affirms that both sides were playing a (serious) game to establish positions and assert rights more than they were interested in war. Of course, incidents intended to reinforce maritime claims and hostile actions can look the same right up until ordnance is exchanged, but now both sides could be more confident that if shooting did start, it was an intentional act of war. Precedent for Restraint In Asia, there is recent and dramatic precedent for restraint, even after an unambiguously hostile local event, which belies theoretical arguments about the risk of miscalculation and unintended escalation. When the South Korean warship Cheonan was sunk in 2010, South Korea determined that North Korea was responsible. Far from a mere ‘incident’ of the sort worried over in the South China Sea, this was a belligerent act against South Korea’s armed forces. And yet, there was no miscalculation-fueled conflict spiral, and instead a strategically calibrated response. It remains unknown whether the sinking of the Cheonan was ordered by the North Koreans (they continue to deny any responsibility), the act of a renegade, or, perhaps least plausibly, an accident. What is clear is that despite a sunken ship and 46 sailors killed, the incident did not spiral out of control. This suggests that South Korea’s political calculus did not view militarily punishing North Korea worth the risk of a renewed – and potentially nuclear – war, which is to say that an extraordinary but tactical-level event did not trump strategic preferences. Even so, some take the miscalculation-escalation dynamic so far as to suggest that incidents between fishing vessels and coast guards in the South China Sea might lead to war. In view of the Cold War record and the recent Cheonan example, such propositions are drastically overstated. It is conceivable that a state already resolved to escalate a dispute militarily might view a local maritime incident as a convenient casus belli. But in that emphatically calculated case, no institutional impediments to such incidents would prevent the hostility.

### No China-Japan War

#### No China Japan war.

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Yet, we should not be too worried about a possible conflict erupting between China and Japan, because of the dispute over the Senkaku/Diaoyu Islands in the East China Sea. The chances of a war between the neighbours are highly unlikely. Besides certain similarities to the South China Sea strategy, Beijing faces a much more powerful opponent in Japan than those it opposes in the waters to the south. Both countries are highly intertwined and share a large trade volume; that would suffer much should both parties engage militarily. Furthermore, the prospect of the United States being drawn into the conflict would be too dangerous for China, especially with a large number of U.S. troops positioned on nearby Okinawa. In conclusion The concrete case of Beijing publicly displaying the islands as a part of the Chinese territory is unlikely to have a direct consequence, as it does not represent a military threat to Japan and will not alter the current status quo. Furthermore, China has been known to use such means of state propaganda before. In conclusion, the chances of a fully-fledged conflict between both nations are remote. This was reiterated by Chinese defence minister Wei Fenghe at a speech at the Shangri-La Dialogue in Singapore while condemning the prospect of a war between China and Japan, and the eventual involvement of the United States.

# Solvency Answers

## 1NC Stuff

### No cooperation

#### Submarine trading is the key final straw; wrecks NATO cohesion

Daniel Williams 21, Daniel Williams is a former foreign correspondent for The Washington Post, Los Angeles Times and Miami Herald and an ex-researcher for Human Rights Watch, 9/18/21, “US-Australia submarine deal rocks NATO alliance,” *Asia Times*, <https://asiatimes.com/2021/09/us-australia-submarine-deal-rocks-nato-alliance/>, JH

The United States, by elbowing France aside in a deal with Australia over military submarine purchases, has once again raised doubts about  Washington’s commitment to the NATO alliance.

Washington has also highlighted the speed with which President Joe Biden is pivoting, at least militarily, to East Asia.

When Biden succeeded the oft-hostile Donald Trump, European allies expected that his revival heralded a new era of close cooperation. Instead, NATO has been hit with secretive decisions by Washington that suggest disdain for Europe in general and, in this case, top ally France in particular.

Most lately, there was Biden’s helter-skelter withdrawal from Afghanistan and a chaotic exodus of civilians that took place with minimal coordination with NATO allies.  In April, when Biden made his decision to pull out, NATO had some 7,000 troops in the country compared with 2,500 Americans. When in July, Biden ordered the evacuation of the Bagram joint military air base in Afghanistan, he not only failed to inform the Afghan government ahead of time but also NATO.

Biden offended his eastern European allies by acquiescing to Germany’s request it bless Nord Stream 2, the natural gas pipeline that bypasses Ukraine and might give Moscow free rein to use energy as an economic weapon against them.

The submarine decision shows that the American new military focus east may disrupt traditional allies in the West. The sub deal with further suggests there may be more urgency than expected in bolstering a budding Indo-Pacific alliance to include Japan and India.

Biden is scheduled to meet with leaders from Japan, India and Australia in Washington on September 23. It will be the first face-to-face meeting of the so-called Quadrilateral Security Dialogue, also known as the Quad, which seeks to coordinate policies on several issues, notably China’s growing military power in East Asia.

The French were livid about the Australia about-face on submarines and US involvement. On Friday, President Emmanuel Macron recalled his ambassadors from Washington and Australia.

France – America’s oldest ally – canceled a Washington party to commemorate the 240th anniversary of the sea battle between French and British ships off Yorktown, Virginia. The French victory permitted troops under the command of George Washington to defeat the British and end the Revolutionary war.

Macron had signed a $100 billion deal to sell Australia 12 diesel-powered submarines. Secretly, the US countered by arranging to provide Australia with technology to build nuclear-propelled subs and to cancel the French order. Secretary of States Antony Blinken said France was informed in advance of the deal, but he declined to say when.

French Foreign Affairs Minister Jean-Yves Le Drian called the turn of events a stab in the back. “We had established a trusting relationship with Australia, and this trust was betrayed,” he said. He added France was given no heads-up on the change of plans.

Le Drian also launched an especially biting critique of Biden, comparing him to the despised Trump. “What concerns me as well is the American behavior,” he said. “This brutal, unilateral, unpredictable decision looks very much like what Mr Trump used to do. Allies don’t do this to each other.”

French Armed Forces Minister Florence Parly complained that the Americans had decided to push aside an ally “at a time when we are facing unprecedented challenges in the Indo-Pacific region.”

For all the hub-bub, the Macron government had not shown any enthusiasm for NATO possibly being dragged by the US into a confrontation with China. At the June NATO summit, Macron publicly threw scorn on the idea. “NATO is an organization that concerns the North Atlantic. China has little to do with the North Atlantic,” he said.

He wasn’t alone. Germany’s Chancellor Angel Merkel, described Russia, not China, as “a major challenge” and that NATO must not “simply negate China.”

“We have to find the right balance.” she concluded.

#### Plan fails—other countries don’t want to data share and infrastructure barriers

CSIS 16- a bipartisan, nonprofit policy research organization dedicated to advancing practical ideas to address the world’s greatest challenges. (Center for Strategic and International Studies, “Undersea Warfare in Northern Europe,” CSIS, July 21, 2016, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/160721\_Hicks\_UnderseaWarfare\_Web.pdf)//mcu

Achieving this vision will be difficult given national sensitivities about data sharing in this domain. Some countries may also be unwilling to share data produced by national intelligence assets with their own tactical units. The United States faced this problem at certain points during the Cold War and **it has the potential to again complicate efforts to achieve the clearest possible picture of the undersea domain.** These efforts will also be hindered by the physical challenges of wirelessly transmitting large quantities of data from disparate sensors to centralized processing locations. Bandwidth limitations and national sensitivities surrounding encrypted communications are well understood within certain intelligence communities, especially those that work with unmanned aerial systems (UAS), but are not uniformly understood across the policy community.

### AT: Detection---1NC

#### Laundry list of structural factors that make detection impossible

Gates 16. Jonathan Gates is a defence consultant with a career spanning 35 years. In the Royal Corps of Naval Constructors, he managed multidisciplinary projects and spent a period as Engineering Director of the Al-Yamamah contract. Since 1998 he has been visiting professor at University College London’s department of Naval Architecture and Marine Engineering; “Is the SSBN Deterrent Vulnerable to Autonomous Drones?”; December 21, 2016; The RUSI Journal Volume 161, 2016 - Issue 6; <https://www.tandfonline.com/doi/full/10.1080/03071847.2016.1265834> //BY

Conclusion There are many types of autonomous vehicles currently available or in development for a potential ASW role. UAVs, UUVs and USVs are all being developed, and the tasks that they are being designed to perform are varied. However, what emerges is that the environmental conditions experienced by the different types of drone are different and this limits the types of operations that they can carry out. Unlike many of the tasks undertaken by drones in general, searching for submarines is extremely difficult as the latter are designed to disappear. For this reason, autonomous vehicles are unlikely to represent a revolutionary change, although their emerging capability will have implications for submarine and ASW operations. There is a potential evolutionary path that incorporates autonomous vehicle technology into naval operations that will improve effectiveness or lower costs. The use of autonomous vehicles (especially large, fast USVs, large ship-deployed UUVs and UAVs) could deny areas of operation to submarines, but such overt surveillance would be open to avoidance, and could be challenged by other naval vessels and countermeasures as part of a layered defence. The below-water sensors available to UAVs (laser, magnetic anomaly) and UUVs (high-frequency sonar) have very short detection ranges. Even if a submarine-like target were detected, the autonomous vehicle would need to track and classify the target as an enemy submarine and to report back to headquarters. This would require a further degree of sophistication with cost implications to be developed. The assumption that large numbers of ‘lostcost’ autonomous vehicles will make the oceans transparent is misleading because it would take an immense number of vehicles to cover even a fraction of an SSBN’s operational areas.

### AT: Detection ---2NC

#### Laundry list of structural factors that make detection impossible

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#### Improved sensing fails – countermeasures increase risk of escalation.

**Horowitz et al 19** [Michael C. Horowitz, Paul Scharre, and Alexander Velez-Green, Michael C. Horowitz is Richard Perry Professor and the Director of Perry World House at the University of Pennsylvania. He is also an adjunct senior fellow at the Center for a New American Security. , Senior Fellow and Director of the Technology and National Security Program at the Center for a New American Security, Alexander Velez-Green is a Joseph S. Nye, Jr. Research Intern in the 20YY Warfare Initiative at the Center for a New American Security. His research focuses on the impact of autonomous weapon systems on international strategic stability. Mr. Velez-Green graduated from Harvard College where he focused on Middle Eastern politics and the challenges of modern warfare. , 12-11-2019, accessed on 7-2-2022, Cornell University, "A Stable Nuclear Future? The Impact of Autonomous Systems and Artificial Intelligence", <https://arxiv.org/abs/1912.05291#:~:text=The%20Impact%20of%20Autonomous%20Systems%20and%20Artificial%20Intelligence,-Michael%20C.&text=The%20potential%20for%20advances%20in,critical%20question%20for%20international%20politics>. Mimou]

* link about increasing uuvs

Claims that AI could generate a “transparent ocean”112 or “selective ocean transparency”113 likely overstate the ability of low-cost UUVs, USVs, and UAVs to conduct these steps. First, in order to be low-cost, uninhabited vehicles are generally of limited size, weight, and power (SWaP) capacity, at least relative to traditional attack submarines. These facts, combined with the inherent physics-based difficulties of sensing in the undersea environment,114 mean that the sensors carried by any given low-cost UUV, USV, or UAV will be of limited detection range regardless of the phenomenologies they employ.115 Given the sensors’ limited range, ASW forces would need to deploy large numbers of sensor vehicles to seamlessly cover even small oceanic areas.116 UUVs in particular are limited in endurance, because of their need to rely on air-independent power sources such as batteries or fuel cells. This means that additional UUVs would be needed to sustain a track on a submarine over time, as UUVs reach the end of the their operational endurance and need to return to base. (Ultra-long endurance UUV power solutions, such as thermal gliders that draw energy from ocean thermoclines, lack sufficient speed and power to maintain track on a submarine.117) While fleets of UUVs, USVs, and UAVs are likely to have cost-savings relative to traditional assets and will be valuable supplements in a “high-low mix” of ASW capabilities, the scale of assets needed to render even a portion of the ocean “transparent” would likely be enormous. Setting cost and practicality aside, ASW forces would also have to keep these sensors appropriately positioned to maintain high-confidence area surveillance and target tracking. This would require a level of multi-system control reliability and resilience not yet demonstrated.118 Fewer sensors would be required to monitor ocean chokepoints. But only Chinese and British SSBNs must pass through chokepoints to hold their primary targets at risk – and both countries have offset this risk. Although Chinese SSBNs would need to pass through chokepoints in the First Island Chain to cover the entire United States, China’s land-based mobile ICBM force can cover targets at that range. Likewise, British SSBNs must pass through chokepoints to the north or south of Ireland to reach deep waters. But, as British Rear Admiral John Gower has written, monitoring those chokepoints would probably still require a high number of sensors.119 And the costs of maintaining or cycling those systems would still be high. Furthermore – and crucially – any UUVs, USVs, or UAVs deployed in the chokepoints would be subject to countermeasures employed on an adaptive basis, including improved stealth, jamming, multi-phenomenology decoys and spoofing, evasive maneuvers, or outright destruction by SSBN protection forces.120 Many of the same countermeasures could also be used against sensors operating in the open ocean. Even if ASW forces were able to maintain optimal sensor coverage in the search area, they would then face problems of data transmission that automation is ill suited to solve. The UUVs, USVs, and UAVs sent to monitor the open ocean or a chokepoint must be able to share data – processed or raw – amongst themselves – directly or through command nodes – in a timely manner in order to maintain coverage, cue and direct searches, confidently classify a contact as an SSBN, and then support weapons employment against the SSBN. In order to be used effectively, any vehicle that attains a track on an SSBN would need to be able to transmit that data to another vehicle.121 While highly automated network management technologies may be able to enhance communications resilience between uninhabited – or uninhabited and inhabited – ASW platforms,122 such data transmission will remain a vulnerability for any undersea communications.123 It bears noting that the physics of undersea communications results in fairly short range communications paths at low data rates. Longer range communications paths and higher data rates forces reliance on surface or airborne communications relays that are vulnerable to jamming or other interference. Even temporary or partial delays in data transmission could undermine ASW forces’ abilities to localize an SSBN – and given that the window of opportunity to localize a submarine may be very short, an inopportune communications delay or disruption may make the difference between ASW success and failure.124 Finally, if we assume that ASW forces relying on UUVs, USVs, and UAVs were able to confidently classify and localize an SSBN in their search area, they would need to maintain localization long enough for an ASW weapons-carrying platform to close within attack range of the SSBN and successfully engage it. If a weapons-carrying platform is located close by, for instance, near a chokepoint through which a SSBN is transiting and where that SSBN’s protection forces are unable provide effective coverage – again, an implausible scenario for reasons of both geography and nuclear force structure for all nuclear-armed states – this may be a relatively easy problem to solve. However, if the search is occurring in the open ocean, the sheer expanse of that area suggests that a weapons-carrying platform is unlikely to be within immediately-actionable proximity of the SSBN when confident classification is made.125 Automated protocols might reduce the time required to signal and dispatch an ASW weaponscarrying platform. But the weapons-carrying platform’s transit time alone would leave a window for the SSBN’s crew to conduct countermeasures—or for inherently dynamic underwater conditions to degrade the ability of the sensors in contact to maintain track. This time window could be reduced by arming uninhabited vehicles directly. Nevertheless, the problems of coordinating multiple vehicles, at scale, for an extended period of time, and robustly in a challenging communications environment amidst adversary countermeasures remains. If ASW forces miss any of these steps, then they will be unable to detect, classify, localize, and engage the SSBN. To successfully prosecute a disarming first strike against a nation’s entire SSBN fleet, an opposing nation’s ASW forces would need to execute the entire kill chain for every one of those boats – and probably near-simultaneously to avoid triggering fleet-wide countermeasures (which would render subsequent ASW operations even more difficult) or strategic escalation.126

#### They are strategically useless

**Shah 22** [Akash Shah, Akash Shah works as a Research Officer at Strategic Vision Institute, Islamabad. His work focuses on developments and militarization in outer space. 6-19-2022, "Could the Orca Autonomous Submarine Forever Change Nuclear War?," National Interest, <https://nationalinterest.org/blog/buzz/could-orca-autonomous-submarine-forever-change-nuclear-war-203085> mimou]

One of the crucial elements of a secure second-strike capability is an early warning of incoming nuclear missiles and launch platforms being communicated to strike back. However, communication with a submerged vessel is one of the most challenging aspects of underwater warfare. The stealth feature of a submarine is only viable if it is underwater as the probability of detection and interception increases when it is closer to the surface. This conundrum of communication while maintaining stealthiness is somewhat addressed by using the extremely low frequency of 3 Hz to 30 Hz.

However, in the case of autonomous unmanned submarines carrying nukes, one can never be sure if the transmitted message is conceived in time and in the manner it was intended. When compared with the potential for autonomous underwater platforms to enhance a country’s deterrence capabilities, the risk and cost, if things go wrong, are simply too high.

Despite having little to no utility in a nuclear standoff, Orca-class submarines are still likely to have a considerable impact on the future of naval warfare. The potency of nuclear weapons is such that the core principles pertinent to their deployment and operation are more or less the same since their advent, regardless of the technology that has exponentially improved since Trinity, the first detonation of a nuclear bomb.

#### defensive measures prevent detection regardless of the plan

**Gates 16** [Jonathan Gates, Jonathan Gates is a defence consultant with a career spanning 35 years. His initial work in the Royal Corps of Naval Constructors concentrated on the design of warships, their sensors and weapons. Subsequently, in the defence industry, he managed multidisciplinary projects and spent a period as Engineering Director of the Al-Yamamah contract. 12-21-2016, accessed on 7-2-2022, Proxy.lib.umich, "Is the SSBN Deterrent Vulnerable to Autonomous Drones?", https://www.tandfonline.com/doi/abs/10.1080/03071847.2016.1265834 mimou]

Aircraft use one type of sensor to search for submarines that has been proposed for UAVs – magnetic anomaly detectors. These sense the disturbance of the Earth’s magnetic field produced by the submarine’s ferromagnetic hull and steel components. The steel hull of a submarine (and of most surface ships) not only acts asalarge magnet, but its movement through the water generates additional magnetic effects. These effects can be mitigated if a submarine uses a degaussing system – coils of wire within the vessel that carry an electrical current to generate an equal and opposite magnetic field to that of the hull. This ‘magnetic cloaking device’ cancels out the magnetic disturbance. The latest ‘closed-loop degaussing system’ is very effective at reducing a submarine’s magnetic signature. Nevertheless, close to the vessel the magnetic field of the submarine is irregular and difficult to cancel out completely. This gives some opportunity for the small residual magnetic disturbance to be detected within about 1 km, meaning that magnetic anomaly detectors are very short-range sensors.

Advances in technology have led to the miniaturisation of magnetic anomaly detectors so they could be mounted on UAVs; these detectors are now being considered for the ship- and aircraftlaunched MagEagle version of the ScanEagle autonomous UAVs. 11 These UAVs would be useful for anti-submarine warfare forces to confirm the exact position of a submarine that has already been detected. However, their detection range is so modest that searching the vast spaces of the unpredictable oceans is unlikely to be the best use of UAVs. Moreover, advances in detection technology are usually countered by advances in signature reduction (improved degaussing) and consequent further reduction of detection ranges. The introduction of new countermeasures to confuse the detector would also mitigate the advances in detection technology.

### AT: AI Intel Sharing---1NC

#### Dozens of structural factors within the DoD make AI data-sharing with other countries impossible---storage, bandwidth, interoperability, incomplete documentation, murky ownership

Tarraf et al. 19. Dr. Danielle C. Tarraf is a Senior Information Scientist at the RAND Corporation. She was previously on the Electrical and Computer Engineering faculty at Johns Hopkins, and has been a visiting/summer faculty fellow at the Air Force Research Lab. She is the recipient of multiple awards, including an NSF CAREER award in 2010 and an AFOSR Young Investigator award in 2011. She received her Ph.D. from MIT in 2006; “The Department of Defense Posture for Artificial Intelligence”; 2019; RAND Corporation; <https://www.rand.org/content/dam/rand/pubs/research_reports/RR4200/RR4229/RAND_RR4229.pdf> //BY

Data The study team interviewed and collected input from many DoD stakeholders with responsibility for data and infrastructure. The team also interviewed DoD personnel who use these data and infrastructure for analytics or AI purposes. One striking aspect of our interviews was the general enthusiasm expressed for the JCF, with “wish lists” that included the development of uniform policies for sandboxing and application programming interfaces,32 the development of common algorithm libraries and repositories for open source projects, and reuse of code components and documentation of best practices (see section “Organization: At the OSD Level” in Appendix B). A notable development within DoD is the recent creation of the CDO role, with Michael Conlin in place as DoD’s first CDO as of August 2018. We anticipate that with time, the data posture of DoD will significantly evolve. Nonetheless, through our interviews, we identified several serious obstacles and impediments in regard to data at present. Data are not collected and stored at every opportunity. DoD’s software infrastructure exists in an environment in which storage space remains a scarce resource and many opportunities to record data are missed. Even if modern storage infrastructure capacities were acquired, additional barriers might prevent the mass collection and storage of 32 Sandboxing refers to providing an isolated environment for experimentation with software. Sandbox environments would ideally have some amount of test data and computing resources but are set up so that what happens in the sandbox is isolated from the production environment that supports actual real-world operations. 58 The Department of Defense Posture for Artificial Intelligence data. In particular, DoD still faces significant constraints on network bandwidth, which can hamper the ability to move data collected from sensors in the field to a location where they can be stored. Additionally, DoD’s suite of software was designed for and implemented in an era in which applications stored only data for which DoD had an immediate use, rather than speculatively storing data that could be mined for insights by professionals. This situation has resulted both in inadequate data storage and in storage of less-appropriate data; in addition, too much of the data collected have already been transformed from a raw, foundational form into an intermediate or aggregated result. These transformations, although an appropriate optimization at the time, strip away crucial context from information needed to train modern ML-based algorithms. Finally, outdated collection processes result in some data not being collected and digitized; recent RAND work on acquisition data within DoD illustrates this point.33 Access to existing data is limited. Several barriers within DoD present substantial obstacles to data-sharing today. First, personnel might view data as a means of retaining power or value in DoD or of protecting their work from extensive oversight, and therefore those personnel resist data-sharing. Additionally, many data owners resist sharing their data out of security concerns and the worry that another organization might suffer a security breach. Finally, the security clearance process and other bureaucratic procedures can introduce a significant lag before an individual will be allowed to access data. This problem presents a particular difficulty in recruiting new talent into DoD, and substantially lowers productivity, even for long-standing DoD personnel. Some of these issues, as they pertain to acquisition data, were highlighted in a recent RAND report.34 Informal networks can substantially reduce the delay in gaining access to data, but based on our interviews, these workarounds appear to be haphazard. Lack of interoperability in systems across DoD creates challenges. Interoperability of data collected by different systems, even within the same functional domain, remains a problem. Software applications within DoD have not typically been designed to work with other DoD applications—even applications in the same functional domain. Consequently, establishing relationships between data collected by one system and data collected by another can be virtually impossible. Even worse, it appears that DoD leadership is often presented with inconsistent values originating from different systems for the same data point, undermining leadership’s willingness to trust data from DoD systems or make decisions based on data at all (see section “Data” in Appendix B). The data that exist are not always understandable or traceable. DoD systems frequently lack the documentation or metadata required to provide context as to what particular data actually mean or how they were generated. For example, an Army database might store a numeric value for the number of tanks at a particular facility, but it might not explain whether this number indicates all functional tanks, all tanks assigned to a particular unit, or all tanks of any status present at the location. Other data values with less descriptive names will frequently be even more difficult to comprehend and use. The lack of any centralized tool for data service means that it is difficult for DoD personnel, even in leadership, to discover what data might be available to inform a question. Instead, discovering new data sources and interpreting them typically requires personal networks or other informal mechanisms. In sum, all indications are that DoD data are not currently being used to their full potential. Overall, the problems we noted here represent a formidable obstacle to implementing AI algorithms,35 even at the level of enterprise AI. Both Project Maven and the JAIC’s preventative maintenance prototype have found that issues around data quality and availability are a primary barrier to progress (see section “Data” in Appendix B). These issues, if left unresolved, will continue to hamper the development and deployment of AI throughout DoD. Additionally, we highlight the following friction point. There is ambiguity in data ownership where external vendors are involved. In theory, data that originate in DoD should be owned by DoD. In practice, when DoD data are analyzed or otherwise worked on by external vendors, the ownership of the data, albeit in a new modified form, becomes murky. This issue was highlighted in recent unpublished RAND work addressing weapon system intellectual property and data rights. This ambiguity of ownership leads to multiple problems beyond the specific ownership and potential loss of control of the data, including vendor lock to retain use of the data, the inability to aggregate data across multiple vendors, and the inability to use the data for additional internal purposes, among others. Although this problem is not unique to DoD, as some of our industry interviewees described (see section “Industry: Data” in Appendix C), it is one that DoD also needs to come to terms with.

#### Lack of infrastructure means data pooling is impossible AND allies say no

Ludwigson and Wright 22. Jon Ludwigson is a Director in GAO’s (US Government Accountability Office) Contracting and National Security Acquisitions (CNSA) team. Candice Wright is a Director in GAO’s Science, Technology Assessment, and Analytics team. She oversees GAO’s work on federally funded research, intellectual property protection and management, and federal efforts to help commercialize innovative technologies and enhance U.S. economic competitiveness; “ARTIFICIAL INTELLIGENCE Status of Developing and Acquiring Capabilities for Weapon Systems”; Feburary 2022; United States Government Accountability Office Report to the Committee on Armed Services, U.S. Senate; <https://www.gao.gov/assets/gao-22-104765.pdf> //BY

Lack of cross-service digital infrastructure to support AI. DOD does not have the necessary digital infrastructure in place to develop and scale AI across the department, a point echoed by the National say no Security Commission on Artificial Intelligence and various DOD officials. According to Joint AI Center documentation, AI development requires tools, technologies, and computing infrastructure and lack of access can be a deterrent to adopting or experimenting with AI capabilities. Additionally, officials across DOD headquarters entities and the military services told us that the department’s current approach to AI development—in which each component works in isolation—is a hindrance as it inhibits the sharing of data and development tools.

### 2NC---AT: Naval Dominance

#### Chinese unmanned sumbarines are developed due to increased UUV’s – gives them the lead

Chen 18 Stephen Chen 7-23-2018 "China military develops robotic submarines to launch a new era of sea power" <https://www.scmp.com/news/china/society/article/2156361/china-developing-unmanned-ai-submarines-launch-new-era-sea-power> (Stephen Chen investigates major research projects in China, a new power house of scientific and technological innovation. He has worked for the Post since 2006. He is an alumnus of Shantou University, the Hong Kong University of Science and Technology, and the Semester at Sea programme which he attended with a full scholarship from the Seawise Foundation.)//Elmer

China is developing large, smart and relatively low-cost unmanned submarines that can roam the world’s oceans to perform a wide range of missions, from **reconnaissance** to **mine placement** to even **suicide attacks against enemy vessels**, according to scientists involved in these artificial intelligence (AI) projects. The autonomous robotic submarines are expected to be deployed in the **early 2020s**. While not intended to entirely replace human-operated submarines, they will challenge the **advantageous position established by Western naval powers** after the second world war. The robotic subs are aimed particularly at the United States forces in strategic waters like **the South China Sea** and western Pacific Ocean, the researchers said. China boosts naval power with Asia’s most advanced warship The project is part of the government's ambitious plan to boost the country's **naval power with AI technology**. China has built the world's largest testing facility for surface drone boats in Zhuhai, Guangdong province. Military researchers are also developing an AI-assisted support system for submarine commanders. As the South China Morning Post reported earlier this year, that system will help captains make faster, more accurate judgments in the heat of combat situations. The new class of unmanned submarines will join the other autonomous or manned military systems on water, land and orbit to carry out missions in coordinated efforts, according to the researchers. **The submarines will have no human operators** on board. They will go out, handle their assignments and return to base on their own. They may establish contact with the ground command periodically for updates, but are by design capable of **completing missions without human intervention**. China is developing autonomous robotic submarines to join other manned military systems such as the Chinese navy's Type 039A diesel electric submarine (pictured) to carry out coordinated missions on water, land and orbit. Photo: Handout But the researchers also noted that AI subs had limits, especially at the early stages of deployment. They will start with relatively simple tasks. The purpose of these projects is not to replace human crews entirely. To attack or not to attack, the final decision will still be in the hands of commanders, the researchers said. Current models of unmanned underwater vehicles, or UUVs, are mostly small. Their deployment and recovery require another ship or submarine. They are limited in operational range and payload capacity. Now under development, the AI-powered subs are “giants” compared to the normal UUVs, according to the researchers. They station in dock as conventional submarines. Their cargo bay is reconfigurable and large enough to accommodate a wide range of freight, from powerful surveillance equipment to missiles or torpedoes. Their energy supply comes from diesel-electric engines or other power sources that ensure continuous operation for months. The robotic submarines rely heavily on artificial intelligence to deal with the sea’s complex environment. They must make decisions constantly on their own: changing course and depth to avoid detection; distinguishing civilian from military vessels; choosing the best approach to reach a designated position. They can gather intelligence, deploy mines or station themselves at geographical “chockpoints” where armed forces are bound to pass to ambush enemy targets. They can work with manned submarines as a scout or decoy to draw fire and expose the position of the adversary. If necessary, they can ram into a high-value target. Lin Yang, marine technology equipment director at the Shenyang Institute of Automation, Chinese Academy of Sciences, confirmed to the South China Morning Post this month that China is developing a series of extra-large unmanned underwater vehicles, or XLUUVs. “Yes, we are doing it,” he said. The institute, in China’s northeast Liaoning province, is a major producer of underwater robots to the Chinese military. Lin developed China’s first autonomous underwater vehicle with operational depth beyond 6km. He is now chief scientist of the 912 Project, a classified programme to develop new-generation military underwater robots in time for the 100-year anniversary of the Chinese Communist Party in 2021. Naval drill row signals rough seas ahead for China-US military ties Lin called China’s unmanned submarine programme a countermeasure against similar weapons now under intensive development in the United States. He declined to elaborate on technical specifications because the information was “sensitive”. “It will be announced sooner or later, but not now,” he added. The US military last year made a deal with major defence contractors for two prototype XLUUVs by 2020. The US Navy would choose one prototype for the production of nine vehicles. Lockheed Martin’s Orca system would station in an area of operation with the ability to establish communication to base from time to time. It would return home after deploying payloads, according to the company’s website. “A critical benefit of Orca is that Navy personnel launch, recover, operate, and communicate with the vehicle from a home base and are never placed in harm’s way,” the company said in a statement announcing the system. Technical details on Orca, like its size or operational endurance, are not available. The company did not respond to the Post’s queries. Snubbed in world’s biggest war game, will Beijing make waves in South China Sea? Boeing is developing the other prototype, basing it on its Echo Voyager, a 50-ton autonomous submarine first developed for commercial uses like the mapping of the sea floor. The Echo Voyager is more than 15 metres long and 2.6 metres in diameter, according to Boeing. It can operate for months over a range of 12,000km, more than enough to sail from San Francisco to Shanghai. Its maximum speed reaches 15km an hour. The vessel needs to surface periodically as its batteries need to be recharged by air-breathing diesel engines. It can dive to 3km while carrying up to eight tons of cargo, Boeing said. Russia has reportedly built a large underwater drone capable to carry a nuclear weapon. The Status-6 autonomous torpedo could cruise across large distances between continents at high speed and deliver a 100-megaton warhead, according to news accounts. China enlists top scientists in mission to become military tech superpower The Chinese unmanned submarine would not be nuclear-armed, according to a researcher involved in a separate programme in China. The main advantage of the AI subs is that **they can be produced and operated on a large scale at a relatively low cost**, said the researcher, who requested anonymity because of the sensitivity of the issue. Traditional submarines must attain a high level of stealth to increase the chance of survival. The design has to consider other things including safety, comfort and the mental health of the crew to ensure human safety. All these elements add costs. In the 1990s, an Ohio-class submarine for the US Navy cost US$2 billion. The research, development and purchase of the first 12 of its new Columbia-class submarines, scheduled for delivery in the early 2020s, is more than US$120 billion. In contrast, the budget of the entire Orca programme is about US$40 million, according to Lockheed Martin. An AI sub “can be instructed to take down a nuclear-powered submarine or other high-value targets. It can even perform a kamikaze strike,” said the researcher, referring to the suicide attacks some Japanese fighter pilots made in the second world war. “**The AI has no soul. It is perfect for this kind of job**,” the researcher added. Luo Yuesheng, professor at the College of Automation in Harbin Engineering University, a major development centre for China’s new submarines, contended that AI subs would put the human captains **of other vessels under enormous pressure** in battle. It is not just that the AI subs are fearless, Luo said, but that they could learn from the sinking of other AI vessels **and adjust their strategy continuously**. An unmanned submarine trained to be familiar **to a specific water** “**will be a formidable opponent**”, he said. AI submarines are still at an early stage, Luo noted, and many technical and engineering hurdles remain before they can be deployed in open water. Hardware on board, for instance, must meet high standards of quality and reliability, since no mechanics will be on board to fix a broken engine, repair leaking pipes or tighten a screw, he said. The missions of unmanned submarines will also likely be limited to specific, relatively simple tasks, Luo said.

# Counterplans

## DOS CP

### AT: Intel Deficit

#### The DoS solves---ordering agreements ensure DoS access to AI data

Ludwigson and Wright 22. Jon Ludwigson is a Director in GAO’s (US Government Accountability Office) Contracting and National Security Acquisitions (CNSA) team. Candice Wright is a Director in GAO’s Science, Technology Assessment, and Analytics team. She oversees GAO’s work on federally funded research, intellectual property protection and management, and federal efforts to help commercialize innovative technologies and enhance U.S. economic competitiveness; “ARTIFICIAL INTELLIGENCE Status of Developing and Acquiring Capabilities for Weapon Systems”; Feburary 2022; United States Government Accountability Office Report to the Committee on Armed Services, U.S. Senate; <https://www.gao.gov/assets/gao-22-104765.pdf> //BY

Data readiness for AI. To address concerns regarding the availability of usable data to develop and train AI, the Joint AI Center plans to establish a framework agreement to ensure data readiness for AI. In particular, it is developing a basic ordering agreement—which generally is a written agreement with one or more vendors to provide specified services at a future point in time—that DOD components can use to prepare their data to develop and train AI capabilities.54 This agreement, which DOD intends to award to multiple vendors, will allow DOD components and other government agencies to access commercial data preparation services through an approved list of private vendors to meet their AI data needs. These needs may include data curation, data labeling, securing and encryption, and packaging. Data services acquired or developed by vendors under this agreement will be required to integrate and operate with new or existing DOD cloud platforms and leverage standardized intellectual property terms to ensure government ownership of prepared data, as well as other intellectual property protections for AI. These agreements are expected to be awarded and available in February 2022, according to Joint AI Center officials.

## AUKUS CP

### 1NC --- CP Shell

#### Text:

#### Solves AI Subs better and re-invigorates the alliance

Bondy 21 – Matthew Bondy is vice-president of external relations at Communitech, a Kitchener, ON-based innovation hub. (Matthew Bondy, "AUKUS Is Not Just about Subs: It’s about Advanced Technology," Centre for International Governance Innovation, 12-10-2021, https://www.cigionline.org/articles/aukus-is-not-just-about-subs-its-about-advanced-technology/, Accessed 7-2-2022, LASA-SC)

When, in mid-September, Australia, the United Kingdom and the United States announced the new “AUKUS” security pact among the three partners, it was clear that their first priority was nuclear-powered submarines for the Royal Australian Navy.

As US Naval War College Professor Andrew S. Erickson wrote in Foreign Policy, the nuclear submarine play is a “no brainer” for Australia. Even though the deal to procure nuclear subs through technology sharing with the United States and the United Kingdom upset France, which had been set to sell conventional attack submarines to Australia, the move was a diplomatic and security master stroke for Australia, which seeks closer security integration with the United States as tensions with China continue to rise.

The power and endurance associated with nuclear submarines speak to what Australia calculates it needs for its own defence in a tough neighbourhood. China has adopted a threatening posture toward Australia, and the latter clearly feels there is no option but to respond with a show of strength.

But as I wrote shortly after AUKUS was announced, this deal was never going to be limited to nuclear subs. The trio of partners telegraphed from the outset that the agreement would expand to deeper collaboration on high-tech initiatives such as cybersecurity and quantum cryptography.

Tom Tugendhat, chair of the United Kingdom’s foreign affairs committee, put his finger on it from the day the pact was announced. He wrote, “From artificial intelligence to advanced technology the US, UK and Australia will now be able to cost save by increasing platform sharing and innovation costs. Particularly for the smaller two, that’s game-changing.”

In a mere two months — no time flat, in international diplomacy — AUKUS members have brought this intention to life.

The Wall Street Journal reported on November 17 that Australia plans to invest US$81 million in quantum technology, including a new innovation hub “that will foster strategic partnerships with like-minded countries” to commercialize that forthcoming Australian research.

Indicating the depth of the technology sharing likely to underpin the new institute’s research, Australian political science professor Andrew O’Neil, quoted in the same article, has stated that the “AUKUS pact gives us access to key technologies that can reinforce our ability to maintain self reliance as a national defense strategy going forward.” O’Neil says that, historically, “there’s always been a slight point of contention among Australian policy makers in that America has never really let Australia into the crown jewels of U.S. capabilities.”

#### Consulting AUKUS solves broader relations

Moroney 22 – Jennifer Moroney is a senior political scientist at the RAND Corporation and manages many of RAND's security cooperation–related projects for Department of Defense clients. (Jennifer, "Making AUKUS Work," 3-22-2022, https://www.rand.org/blog/2022/03/making-aukus-work.html, Accessed 7-2-2022, LASA-SC)

An unprecedented U.S. legislative framework would include not only information sharing agreements on nuclear propulsion, but also on much broader areas in key sectors. Such a framework could allow for innovation to flourish, particularly as AUKUS looks for opportunities in artificial intelligence, quantum, and other key defense technologies. The role of the private sector, and the complications therein, is an under analyzed aspect to AUKUS. For example, Lockheed Martin was going to provide Australia with the weapons systems for its recently terminated French submarine contract; now the company may well be the supplier of the weapons systems for newly planned Australian nuclear submarine. And yet, just two days after the announcement of AUKUS, BAE and Rolls Royce won the contract to design a new nuclear powered submarine for the UK, which may have implications for Australia's new submarine, and Lockheed, too. The involvement of defense industry will also raise issues regarding commercial data sensitivities and intellectual property issues—both of which should be studied, as they may require additional legislative attention.

AUKUS would need to be adequately resourced to take on these tasks, which would entail a distributed governance framework with shared responsibilities and committed staff and resources, including political and organizational support from Canberra, London, and Washington. In the U.S., for example, the Departments of Defense, State and Energy would have roles to play. It has been assumed that AUKUS is largely focused on the Indo-Pacific, thus drawing interests from U.S. Indo-Pacific Command. That said, given the broad technology interest in AUKUS, it also draws in the Defense Technology Security Agency and Cyber Command. The U.K. would see input from the Cabinet Office, the Ministry of Defence, the Foreign, Commonwealth and Development Office and the Royal Navy. In Canberra the primary interests will be from the Department of Prime Minister and Cabinet, the Department of Foreign Affairs and Trade, the Royal Australian Navy and the Department of Defence. Two Australian cabinet officials have defence portfolios relevant to AUKUS, including the minister for defence as well as the minister for defence industry.

In launching AUKUS, a number of working groups have been established to study and flesh out the cooperative details. In order to be effective, these working groups could be empowered by strong leadership, informed by evidence-based analysis, and encouraged to convene regularly. They could go beyond admiring the problems to identifying solutions. The success of the working groups would also greatly depend on the active and continuous support of senior leadership from all three nations.

More specifically, the AUKUS working groups could have access to the requisite expertise. Senior leaders could also ensure that the working groups have access to experts, practitioners, and program implementers from Australia, the U.S., and the UK who would understand the breadth and depth of the existing barriers and the necessary workarounds. This could be challenging: in the process of developing the cooperative framework, AUKUS is likely to shine a bright light on the many barriers to collaboration—not only technical, but also bureaucratic, budgetary, cultural, regulatory, political, and strategic.

AUKUS could benefit from clear, measurable outcomes for each working group, developed from the outset. For example, successfully meeting working group deliverable dates is an obvious and essential metric, as is consistent maintenance of working group meeting schedules and speed of decision making. Progress in armaments cooperation is another metric, and includes changing processes that facilitate innovation and deepening of cooperation. The ability to resolve key bureaucratic barriers (such as routine overclassification of information) and regulatory challenges (such as technology transfer limitations) would be yet another hurdle to overcome. The three capitals might develop multi-year plans detailing proposed projects, anticipated costs, and timelines for delivery. Success on each of these projects could be reported annually.

The experiment of AUKUS clearly seems to offer significant opportunities for Canberra, London, and Washington. More than a repackaging of existing capabilities, AUKUS reimagines the way in which three capable allies could work together, more closely than ever before, in many respects. The potential success of AUKUS will rely upon the effective management of this mini-lateral arrangement, and each countries' willingness to adopt new policies and make legislative changes to allow for this close collaboration. Making such changes would require strong management, but even more so, it would require the recognition from all parties that such changes are necessary to make progress in addressing common, overriding strategic goals. What happens now will determine whether the U.S., Australia and the UK can compete more effectively against China and Russia, or whether AUKUS becomes an interesting footnote in the story of what could have been.

#### AUKUS prevents nuclear war.

## Coop CP

### 1NC --- CP Shell

#### The United States federal government should cooperate with the Russian Federation to establish a strategy to reduce military submarines using artificial intelligence.

#### US modernization drives Russian development – the counterplan ensures de-escalation.

Woolf 22 – Specialist in Nuclear Weapons Policy. ("Russia’s Nuclear Weapons: Doctrine, Forces, and Modernization," CRS, 4-21-2022, https://sgp.fas.org/crs/nuke/R45861.pdf, Accessed 7-2-2022, LASA-SC)

Others argue that the United States is spurring the arms race, in that the expansive U.S. modernization program might heighten the mistrust between the two nations and provide Russia with an incentive to expand its programs beyond what was needed to replace aging Soviet-era systems.155 Former Secretary of Defense William Perry raised this point in an interview in 2015, when the Obama Administration offered its support to the full scope of U.S. nuclear modernization programs. He noted that “we're now at the precipice, maybe I should say the brink, of a new nuclear arms race” that “will be at least as expensive as the arms race we had during the Cold War, which is a lot of money.” 156 Some have disputed the notion that the modernization programs are either evidence of an arms race or an incentive to pursue one. Both nations are modernizing their forces because existing systems are aging out; neither is pursuing these programs because the other is modernizing its forces, and neither would likely cancel its programs if the other refrained from its efforts. As former Secretary of Defense Ashton Carter noted in 2016, “In the end, though, this is about maintaining the bedrock of our security and after too many years of not investing enough, it’s an investment that we, as a nation, have to make because it’s critical to sustaining nuclear deterrence in the 21st century.” 157 Russia seems to be in a similar position; it delayed a planned modernization cycle in the late 1990s and has been pursuing a number of programs at a relatively slow pace since that time. Moreover, the new types of strategic offensive arms introduced recently seem to be more of a response to concerns about U.S. missile defense programs than a response to U.S. offensive modernization programs.

## Alternate Sub-Tracking CPs

### CP—Space-based systems

#### Text: The United States federal government should increase research and development for spaced based monitoring systems [could add SC with NATO]

#### R&D expedites spaced based monitoring systems— allows tracking of Russian subs

CSIS 16- a bipartisan, nonprofit policy research organization dedicated to advancing practical ideas to address the world’s greatest challenges. (Center for Strategic and International Studies, “Undersea Warfare in Northern Europe,” CSIS, July 21, 2016, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/160721\_Hicks\_UnderseaWarfare\_Web.pdf)//mcu

The use of space-based systems for ASW missions is not new. Overhead imaging has been used to track naval deployments that include submarines for at least two decades. Because of this fact, many nations have built covered bases for their submarine fleets to prevent or limit the ability of other nations to monitor their deployments from space. Unclassified sources point to new uses for space-based monitoring systems for ASW. Such systems fall into a broader category of nonacoustic tracking of submerged vessels. These technologies generally include aerial- and space-based sensors, but almost all require the synthesis of multiple sensors in order to accurately track an adversary's submarine. This requires substantial processing and band¬width to achieve. It is believed that the Soviet Union was investing in these technologies before the end of the Cold War. The present state of Russian research in this area is unclear to the CSIS study team. **A breakthrough in this technology area could create a paradigm shift in undersea warfare.** Desired Effect: In the near term, space-based systems will provide some measure of warning before submarine deployment. In the long term, space-based systems could transform undersea warfare. Any such breakthrough is likely decades in the future, but the potentially disruptive nature of these future systems along with potential Soviet/Russian research efforts in this sphere merit some amount of consideration.

#### Satelite imagery is key to monitor adversaries—China and NoKo prove

NTI 21- NTI’s team brings unparalleled vision and expertise to tackling current and future threats. (“Submarine Detection and Monitoring: Open-Source Tools and Technologies,” September 24, 2021, https://www.nti.org/analysis/articles/submarine-detection-and-monitoring-open-source-tools-and-technologies/)//mcu

Readily accessible high-resolution commercial satellite imagery is one of the most important tools for open-source analysis of submarine activity. Imagery enables researchers to monitor naval shipyards and bases for activity visually, such as those in China and North Korea. For example, over the years, researchers have used satellite imagery to glean important information about China’s efforts to expand and modernize its fleet of nuclear submarines. In 2007, just as several of China’s new Jin-class (Type 094) SSBs were commissioned, Federation of American Scientists analyst Hans Kristensen began using Google Earth imagery to count the number of operational Jin-class submarines at various bases and shipyards around the country, and later to study the expansion of China’s submarine infrastructure (a network of shipyards, naval bases, underground facilities for missile storage, and submarine demagnetization facilities).4 Imagery of construction at Longpo Naval Base—the home of China’s southern SSBN fleet—revealed interesting clues about China’s SSBN program. For example, Kristensen observed the installation of China’s first submarine demagnetization facility, which strips submarine hulls of residual magnetic fields, pointing to Chinese efforts to deploy less detectable submarines.5 Catherine Dill of the Center for Nonproliferation Studies (CNS) published an article revisiting efforts to count China’s operational Jin-class submarines, but unlike Kristensen, she did so using high frequency satellite imagery from Planet Labs.6 High frequency imagery has revolutionized open-source analysis because it is characterized by a high revisit rate. Often, Planet Labs prioritizes frequent imaging of the same sites (up to twice daily) to enable rapid change detection, as well as comparison of images across multiple sites over the same time periods. Dill captured images of two critical Chinese submarine facilities—the Bohai shipyard and the Longpo Naval Base—on the same day. This enabled her to count Chinese SSBNs more accurately; when using images from different dates, there is a risk of double counting or other errors. North Korea maintains one of the largest submarine fleets in the world, estimated at between 64 and 86 submarines. The fleet is comprised primarily of conventionally-armed submarines; however, satellite imagery analysis in recent years has uncovered North Korean efforts to build a class of diesel-electric SSBs and submarine launched ballistic missiles (SLBMs).7 In 2014, open-source analysts spotted North Korea’s first Gorae-class (aka Sinpo-class) ballistic missile submarine at the Sinpo South Naval Shipyard.8 At the same time, analysts watched the development and testing of a solid-fueled SLBM that could potentially arm Gorae-class submarines.9

#### R&D will advance SAR imaging

NTI 21- NTI’s team brings unparalleled vision and expertise to tackling current and future threats. (“Submarine Detection and Monitoring: Open-Source Tools and Technologies,” September 24, 2021, https://www.nti.org/analysis/articles/submarine-detection-and-monitoring-open-source-tools-and-technologies/)//mcu

Synthetic aperture radar (SAR) is a type of space-based imaging that uses radar echoes to create very high resolution 2- or 3-dimensional representations of landscapes, bodies of water, buildings, and other objects.10 SAR sensors can pick up tiny changes to landscapes—such as vehicular and foot traffic—that optical sensors cannot detect. SAR imagery first became commercially available in 1995, however companies did not launch high-resolution SAR sensors until 2007. It’s relative newcomer status in the commercial sector means it is less accessible than optical imagery and often prohibitively expensive.11 SAR sensors routinely image the ocean for a variety of environmental, scientific, and law enforcement applications. SAR sensors can also detect the wakes of large surface ships. However, SAR’s ability to detect submarine wakes for anti-submarine warfare (ASW) purposes remains inconclusive. SAR’s ability to enable analysts to detect even tiny changes makes the technology potentially useful for monitoring submarine construction at naval shipyards. For example, SAR imagery could help analysts to monitor North Korea’s Sinpo South Naval Shipyard, and any construction on North Korea’s expanding SSB fleet, by imaging materiel movement. Additionally, SAR sensors could be used to monitor China’s Bohai for frequent updates on the construction of additional Jin-class SSBNs.

#### SARs solve arctic surveillance

Cooper 13- Lieutenant Commander, United States Coast Guard B.S., United States Coast Guard Academy, 1997 M.S., National Intelligence University, 2006 (Chad Cooper, “Enhancing arctic surveillance with space-based radars,” Calhoun: The NPS Institutional Archive DSpace Repository, <https://www.nps.edu/documents/106458200/109356574/Cooper+Thesis,+2013/7cf64692-c6bf-4073-943e-bbf8ff9d2820)//mcu>

From the evidence provided in Chapter I, it should be clear the United States must be aware of the increasing levels of maritime activity in the Arctic Circle. It is strategically imperative for the long term security of North America to understand what maritime activities that are occurring there in order to use U.S. diplomatic, informational, military, and economic power to greatest effect. Moreover, tactical responses to emergent issues such as vessels in distress, hydrocarbon spills, and enforcement of laws and treaties depend on the United States having a sustained information advantage in the Arctic and in particular the U.S. Exclusive Economic Zone (EEZ) contained within the Arctic Circle. Chapter II made evident that **space-based surveillance is likely the best way and perhaps the only practical way to achieve the level of surveillance required of the Arctic Circle**. Given the level of maritime surface area within the Arctic Circle and the applicability of SAR sensors to detecting and characterizing maritime activities, it is sensible that **SAR sensors are the answer to the nation’s Arctic surveillance** needs. Moreover, a space-based SAR mission supporting U.S. and allied government agencies is consistent with the National Security Space Strategy (NSSS) of 2011 which seeks to strengthen safety, stability, and security; enhance advantages from space; and energize the space industrial base (Department of Defense, 2011). The compelling case for using SARs to meet the long-term surveillance needs of the U.S. government in the Arctic begged a significant technical question: what constellation design of SAR sensors would offer the best return on investment for the United States?

### CP—Aerial systems

#### Text: The United States federal government should increase research and development for ariel monitoring systems [could add SC with NATO]

#### Aerial systems allow for better under sea monitoring and a more cohesive stratefy

CSIS 16- a bipartisan, nonprofit policy research organization dedicated to advancing practical ideas to address the world’s greatest challenges. (Center for Strategic and International Studies, “Undersea Warfare in Northern Europe,” CSIS, July 21, 2016, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/160721\_Hicks\_UnderseaWarfare\_Web.pdf)//mcu

Aerial Systems This category encompasses a range of platforms from large MPAs based on commercial airliners to small UAS that can be launched by a single operator. Several European nations are looking to replace or renew their maritime patrol capability. As previously mentioned in Chapter 3, the UK is acquiring several P-8 aircraft and the Norwegians may follow suit. Both Germany and France will likely to have replace their MPA fleets in the 2020s. While a common airframe is unlikely, common payloads could help defer some costs, streamline maintenance, and dramatically improve interoperability. These aerial platforms should have the capability to serve as aerial intelligence processing and dissemi¬nation hubs for a wide range of distributed sensors above, on, and **below the sea.** NATO and partner nations should also consider how **UAS could augment or perhaps replace traditional manned ASW assets**. With their exceptionally long loiter times and potentially high payloads, larger UAS seem to be ideal platforms for seeding a range of distributed undersea sensors on short notice. Such platforms could also serve as a networking hub for collecting data from these disturbed sensors and transmitting it to a surface vessel or other central location of processing. From an aerial sensors perspective, NATO and partners should look beyond advanced periscope detection radars and advanced sonobuoys (or sonobuoy-esque systems). Future aerial sensors could potentially include light detection and ranging (LIDAR) systems or advanced magnetic anomaly detectors. Advances in sensor technologies will likely enable smaller systems to be employed for ASW missions, therefore bringing these capabilities to a wider array of platforms. (For example, small patrol vessels less than 100 feet in length may be able to deploy with small ASW UAS, dramatically improving the capabilities of small navies such as in Lithuania, Latvia, and Estonia.) Desired Effect: UAS have the potential to reshape the aerial ASW mission by creating an **inherently networked solution**, as well as bring ASW abilities to a wider range of platforms. Future sensors may also move away from the acoustic detection paradigm.

#### Advancements in aircrafts solve—provide data and forum for interoperability

Shukla 3/30- an Indian journalist and a retired colonel of Indian Army. He writes articles on defense policy, production and acquisition and currently works as consulting editor with Business Standard (Ajai Shukla, “Navy gets second maritime air surveillance squadron,” Business Standard, March 30, 2022, https://www.business-standard.com/article/current-affairs/navy-gets-second-maritime-air-surveillance-squadron-122033000064\_1.html)//mcu

The Boeing P-8I Poseidon aircraft that INAS 316 will operate is a multi-role, long-range maritime **reconnaissance anti-submarine warfare** (LRMR ASW) **aircraft**, that is equipped with a range of air-to-ship missiles and torpedoes. The aircraft is acknowledged to be the world’s most-deadly LRMR-ASW aircraft. It is a derivative of the Boeing 737-800 airliner, fitted with a plethora of sensors and weaponry, that make it is a potent platform for maritime surveillance and strike, electronic warfare missions, search and rescue and **providing targeting data to other weapon platforms**. It is also the platform of choice for detecting and neutralising enemy ships and submarines in Indian Ocean Region. P-8I Poseidons have played an important role in the two-year stand-off on the Ladakh border with the People’s Liberation Army (PLA), stealthily reconnoitring Chinese positions and picking up PLA deployments in rear areas. The aircraft’s sensors include a Raytheon multi-mode radar to detect aircraft, surface ships, and submarines, while another belly-mounted radar looks backwards like an electronic rear-view mirror. A ‘magnetic anomaly detector’ on the P-8I’s tail **detects submarines** from the magnetic field that large masses of metal (such as submarine hulls) create. Hostile submarines, once detected, are destroyed by on-board Harpoon missiles or Mark 54 torpedoes. Alternatively, the targets are ‘handed on’ digitally to friendly warships, or submarines, which finish the job. Over the years and during joint naval exercises such as Exercise Malabar, Indian P-8I crews have developed joint drills and communication protocols with their foreign counterparts that enable them to take swift and lethal action against hostile warships and submarines. To enhance this **interoperability**, India has concluded joint agreements with partner countries, such as the US. These include the Communications Compatibility and Security Agreement and Basic Exchange and Cooperation Agreement for geospatial co-operation. INAS 316 is commanded by Commander Amit Mohapatra, a Boeing P-8I pilot with extensive operational experience.

#### Drones provide necessary ASW capabilities

Larson 21- a Defense Writer based in Europe. He holds a Master of Public Policy and covers U.S. and Russian security, European defense issues, and German politics and culture. (Caleb Larson, “How The U.S. Navy Could Use Drones To Kill Submarines,” February 17, 2021, <https://www.19fortyfive.com/2021/02/how-the-u-s-navy-could-use-drones-to-kill-submarines/)//mcu>

Sometime late last year, the U.S. Navy tested one of Northrop Grumman’s remotely piloted helicopters for use as **an anti-submarine warfare** platform, USNI News reported. During the evaluation, the Fire Scout drone dropped miniaturized sonobuoys into the water, essentially small acoustic devices that listen for enemy movement underwater. As the name suggests, the primary goal of anti-submarine warfare platforms is to hunt down submarines, in effect creating a protective bubble around surface ships that are particularly vulnerable to submarine attack. Though this mission is typically done by much larger manned aircraft, like the MH-60R Sea Hawk, unmanned platforms like the Fire Scout offer advantages in range and endurance compared to their manned counterparts. They’re also cheaper: the loss of a drone is comparatively light and less risky than putting a human pilot or pilots in harm’s way. In addition to deploying a mini hydrophone, an offensive capability could in theory be packed into some drones in the form of similarly miniaturized torpedos, like Northrop Grumman’s Very Lightweight Torpedo. Given the advantages inherent to unmanned anti-submarine warfare platforms, it comes as no surprise that the Navy is interested. And, it’s not the first time the Navy has been evaluating remotely operated platforms for a specialized ASW role. Northrop Grumman’s Fire Scout isn’t the only done that may protect American strike groups. General Atomics, the firm behind the iconic Predator and Reaper drones, is also adapting one of their drones for a submarine-hunting maritime mission. Similar to the Fire Scout, a modified Reaper drone offers advantages in terms of mission endurance and logistics when compared to a piloted anti-submarine warfare platform like the P-8A Poseidon. General Atomics’s drone would be a boon to Navy logistics: the company asserts that their SeaGuardian maritime drone uses 90% less fuel than similar intelligence and surveillance aircraft and that the platform needs 50% fewer operations and support personnel than the Navy’s current anti-submarine warfare platforms require. Northrop Grumman’s Fire Scout would likely offer savings in fuel and personnel as well. Postscript One of the drawbacks to replacing the manned anti-submarine warfare mission with drones is sonobuoy and torpedo capacity. Though the aforementioned drones do offer real advantages in terms of range and logistics, a single drone simply cannot carry the same quantity of munitions as a much larger manned platform like the Poseidon. S**till, the move toward unmanned anti-submarine warfare platforms brings new and needed capabilities** to the Navy and is a concept worth exploring.

#### Tech exists now but it needs to be developed

Perkins 18- US Navy Captain (Captain William A. Perkins, “Unmanned Air Systems in NATO Anti-Submarine Warfare (ASW),” JAPCC, 2018, https://www.japcc.org/wp-content/uploads/JAPCC\_J25\_screen.pdf)//mcu

Unmanned systems technology offers potential applications for use in the ASW mission area. Although there are some systems in existence today, most of their sensors are directed at an intelligence­gathering mission and have limited direct application to ASW, although innovative use of tactics to exploit sensor capability should continue to be explored. However, **the future is promising for development of unmanned systems which are specifically devoted to the ASW mission**. ASW as a mission requires extended sortie durations and sensor dwell times as well as data fusion and data dissemination early in the prosecution, then requires options for submarine engagement when the situation requires. New technology for swarming systems as well as potential developments in a reliable high­bandwidth optical link capability make the future of unmanned systems a viable near-term solution for aiding in the ASW mission. Regardless, there will remain a requirement for unmanned systems to integrate with other elements in the ASW domain, including ships and manned aircraft. While unmanned systems are well suited for detection and tracking phases of prosecution, manned aircraft will, in the near­ term, likely remain necessary for torpedo delivery for lethal effect.

#### Helicopters are key to NATO ASW

Florentino 18 (Commander Paolo Florentino, “Maritime Rotary Wing,” JAPCC, 2018, https://www.japcc.org/wp-content/uploads/JAPCC\_J25\_screen.pdf)//mcu

Anti-Submarine Warfare (ASW). Although submarine inventories were initially reduced globally after the end of the Cold War, there is a growing trend of non­ Allied submarine operations in all sea areas relevant to NATO operations. In recent years, almost every nation claiming a submarine capability has expanded its cur­ rent inventory with more advanced and less detect­ able submarines. The protection of a maritime force against submarines consists of ‘defence­in­depth’ and close coordination among friendly ships and submarines, helicopters, Maritime Patrol Aircraft (MPA), and shore­based facilities. Maritime ASW helicopters, in particular, have increased in importance due to the decreasing number of MPA available in NATO. These helicopters are equipped with maritime radars optimized to detect submarine snorkels or periscopes. Integrated dipping sonars and dropped active/passive so­ nobuoys can be used to detect and track contacts. Electronic Support Measures (ESM) technology and mounted Magnetic Anomaly Detectors (MAD) are able to confirm the presence of submerged threats, while data link capabilities provide real­time information to the Fleet. Last but not least, ASW helicopters can be fitted with air launched torpedoes, which allow them to attack and destroy enemy submarines.

### CP—Surface Systems

#### Text: The United States federal government should increase research and development for afloat PED systems

#### Aerial systems allow for better under sea monitoring and a more cohesive strategy

CSIS 16- a bipartisan, nonprofit policy research organization dedicated to advancing practical ideas to address the world’s greatest challenges. (Center for Strategic and International Studies, “Undersea Warfare in Northern Europe,” CSIS, July 21, 2016, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/160721\_Hicks\_UnderseaWarfare\_Web.pdf)//mcu

Surface systems are often thought of as second-class citizens when it comes to ASW missions. However, they play an important role in the broader ASW system. They can host a wide array of sensors, embark purpose-built ASW aircraft, and may serve as a floating processing, exploitation, and dissemination (PED) center for a variety of different sensors supporting a theater-level ASW campaign. Planned **NATO investments in large surface vessels capable of performing the ASW mission and their respective sensors are likely sufficient to meet current and future threats**. These vessels are often not used as the proverbial tip of the spear in ASW operations. That said, NATO and its partners should explore investments and experimentation with afloat PED systems to transform these surface ships into the "quarterbacks" of the ASW mission. The use of unmanned surface vessels (USVs) is a potential growth area in these missions. An example of such a system is the Anti-Submarine Warfare Continuous Trail Unmanned Vessel (ACTUV) currently being tested by the U.S. Defense Advanced Research Projects Agency (DARPA). There are also a host of commercially available options in this space. Such platforms use their nontraditional designs (the result of not having a crew) to offer unique capabilities in the ASW mission. They are also tremendously difficult for adversaries to counter due to their low acoustic and optical profiles. Desired Effect: Investments in afloat PED systems can help with the creation of a truly integrated multidomain, multiplatform ASW complex. USVs, like their cousins in other domains, may provide novel capabilities and significant capacity at lower costs than a comparable manned system. **This increased capacity may be an operational necessity given advances in submarine quieting**.

## Hotlines CP

### Hotlines CP

#### CP solves the aff, but not the turn --- UUVs undermine trust in confidence building measures

Zhao ‘18

(TONG, PhD in science, technology, and international affairs from the Georgia Institute of Technology is a fellow in the Nuclear Policy Program at the Carnegie Endowment for International Peace, based at the Carnegie–Tsinghua Center for Global Policy in Beijing. His research focuses on strategic security issues, including nuclear weapons policy, arms control, nonproliferation, missile defense, space security, and other international security issues. He was previously a Stanton nuclear security fellow with the Managing the Atom Project and the International Security Program at the Belfer Center for Science and International Affairs at Harvard University. He has held a number of other positions, including as a nonresident WSD-Handa fellow at Pacific Forum CSIS and working for the Office of Foreign Affairs of the People’s Government of Beijing Municipality. He holds a and received a BS in physics and an MA in international relations from Tsinghua University, “Tides of Change,” pg online @ <https://carnegieendowment.org/files/Zhao_SSBN_final.pdf> //um-ef)

These rules of behavior heavily stress the importance of establishing adequate communication during unplanned encounters at sea, but they have limitations. When submarines are surfaced, they should comply with such rules, but one complication is that when they are underwater, these rules would be irrelevant. Even more problematically, such rules cannot easily be extended to cover unmanned military systems. For instance, compared with manned platforms, unmanned systems are usually designed to be smaller, to be more secretive, and to operate closer to enemy forces. These differences make it more difficult for the two sides to agree on the meaning and implementation of certain CUES provisions, including one that requires vessels to maintain a “safe distance.”20 Another major challenge is communication. Many of the existing communication procedures listed in the CUES—such as the use of sound, light, flag signals, and radio communications—could not be easily implemented with an unmanned system, even if a UUV was piloted remotely, let alone if it could operate autonomously.

### AT: Perm --- Both

#### Perm cant avoid the turn --- China freak out comes BEFORE the CP solves --- they wont wait for communication if UUvs are involved

Zhao ‘18

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Without viable communication mechanisms, Chinese forces protecting SSBNs would have greater difficulty understanding the intentions of U.S. UUVs or USVs.21 During either peacetime or a military crisis, China would have every incentive to interfere with any foreign unmanned system that it detected and that, in its view, posed a potential threat to its SSBNs. After all, clarifying the intentions of unmanned systems would take time (if doing so were somehow possible), and Chinese military commanders might not want to put the SSBNs at risk by waiting to establish communication.

## EU CP

### EU Upgrades and Integration key

#### EU-U.S. gaps in AI development now --- cant solve without significant changes

Christie ‘22

(E. H. Christie, Finnish Institute of International Affairs, “Defence cooperation in artificial intelligence: Bridging the transatlantic gap for a stronger Europe,” European View 2022, Vol. 21(1) 13 –2 //um-ef)

Much has already been achieved in terms of new structures, new initiatives and new policy developments to support the collaborative adoption of AI among NATO Allies and EU member states. In addition to pre-existing structures and mechanisms at both the NATO and EU levels, which have ensured that nations are not starting from scratch, national defence institutions are already able to refer to common policy commitments and to options, whether through NATO or the EDA, for research or capability-development activities. At the same time, ensuring a competitive edge in AI is a truly whole-of-government effort which requires considerable cross-over between the military and civilian realms. Large gaps remain between the US and the EU on certain key indicators. At the same time, the gaps pertaining to research are far smaller. To ensure greater European performance and relevance in AI in general, and its defence applications in particular, it seems desirable to focus on two strategic priorities: investment volumes, both public and private, which need to be significantly increased; and the full use of collaborative mechanisms involving the US. To that end, it would be beneficial for nations on both sides of the Atlantic to ensure that a clear and common vision is set out in forthcoming strategic documents, most notably the EU’s Strategic Compass and NATO’s new Strategic Concept. This should include clear political commitments to increasing investment, both in general and in instruments for promoting collaborative innovation. There are opportunities for ‘more Europe’ through the EDA and the European Defence Fund. But while pursuing those avenues, European capitals should prioritise efforts that complement and enhance transatlantic approaches, in recognition of the reality that the US remains the indispensable ally for Europe’s security.