**Aff---Subs**

**Subs Aff---Core Case Updates**

**1AC---Mines**

**Russian recent actions to increase sea mines will collapse Ukrainian agriculture exports**

**Borger 22** [Julian Borger is the Guardian's world affairs editor. He was previously a correspondent in the US, the Middle East, eastern Europe and the Balkans. His book on the pursuit and capture of the Balkan war criminals, [The Butcher's Trail](https://bookshop.theguardian.com/catalog/product/view/id/359254/?utm_source=editoriallink&utm_medium=merch&utm_campaign=article), is published by Other Press, 6-23-2022, Russian navy ordered to lay mines at Ukraine’s Black Sea ports, says US, Guardian, https://www.theguardian.com/world/2022/jun/23/russian-navy-ordered-to-lay-mines-at-ukraines-black-sea-ports-says-us] Eric

The Russian navy has been given orders **to lay mines at the ports of Odesa and Ochakiv,** and has already mined the Dnieper River, as [**part of a blockade**](https://www.theguardian.com/global-development/ng-interactive/2022/jun/09/the-black-sea-blockade-mapping-the-impact-of-war-in-ukraine-on-the-worlds-food-supply-interactive)**of Ukrainian grain exports,** according to newly declassified US intelligence.

US officials also released satellite images showing the damage inflicted by Russian missile strikes earlier this month on Ukraine’s second biggest grain terminal at nearby Mykolaiv, at a time when the interruption of grain exports threatens to trigger a global famine. Sunflower oil storage tanks at Mykolaiv came under attack on Wednesday.

Russia has denied laying mines around the Black Sea ports, and has turned around the allegations on Kyiv, claiming instead the Ukrainians have mined their own ports.

The US says its intelligence points to a concerted Russian strategy to cut off the stretch of the coast still under Ukrainian control. “The United States has information that the Black Sea fleet is under orders to effectively blockade the Ukrainian ports of Odesa and Ochakiv,” a US official said.

“We can confirm that despite Russia’s public claims that it is not mining the north-western Black Sea, **Russia actually is deploying mines** in the Black Sea **near Ochakiv**. We also have indication that Russian forces previously mined the Dnieper River.”

“The impact of Russia’s actions, which have **caused a cessation of maritime trade** in the northern third of the Black Sea and made the region **unsafe for navigation**, cannot be understated, as Ukraine’s seaborne exports **are vital to global food security**,” the official said, pointing out that Ukraine supplied a 10th of global wheat exports and about **95% of** those exports left the country **through the Black Sea ports.**

**That’s crucial to global agriculture – collapse happens in weeks.**

**Dankevych 22** [Vitalii Dankevych, is an Economics Professor at Polissia National University, 05-26-2022, Unblocking Ukrainian Seaports as a Tool to Overcome the Global Food Crisis – Food Tank, Food Tank, https://foodtank.com/news/2022/05/unblocking-of-ukrainian-seaports-as-a-tool-to-overcome-the-global-food-crisis/] Eric

The Black Sea region typically accounts **for 30 percent** of world **wheat** exports, as well as **20 percent** of **corn** and **75 percent** of **sunflower oil**. In [2020/2021](https://www.ukrinform.ua/rubric-economy/3336434-ukraina-vze-eksportuvala-majze-17-miljoniv-tonn-zerna.html), Ukraine exported 44.7 million tons of cereals and legumes, including 16.6 million tons of wheat, 23.1 million tons of corn, and 4.2 million tons of barley. Sea transport accounted for **92-96 percent** of bulk **cargo exports**, including grain and oilseeds and **95-97 percent of oils** from Ukraine. Data from the forecast of the investment company Dragon Capital and the World Bank show how important Ukraine’s ports are—if the Black Sea remains closed, Ukraine’s GDP will fall by 45 percent.

Because of large-scale Russian aggression, [**six seaports**](https://armyinform.com.ua/2022/05/17/yak-prypynyty-blokuvannya-morskyh-portiv-ukrayiny/)—Yuzhny, Mykolayiv, Olbia, Odesa, Chernomorsk, and Belgorod-Dniester—are unable to accept and send cargo. The ports of Mariupol, Berdyansk, Skadovsk, and Kherson **are closed** due to their temporary occupation.

Attempts are currently being made to conduct logistics through European countries. The Prime Ministers of Ukraine and Poland signed a [memorandum](https://www.kmu.gov.ua/news/premyer-ministri-ukrayini-ta-polshchi-pidpisali-memorandum-pro-posilennya-spivrobitnictva-v-zaliznichnij-sferi) to strengthen cooperation in the railway sphere, which provides for the establishment of a joint logistics company of the two countries. This mechanism of cooperation will increase the volume of rail transportation of Ukrainian exports to the EU and world markets through the Polish ports of Gdynia and Gdansk.

Currently, cooperation in this area is being established with Romania, Moldova, Lithuania, and Latvia. The possibility of using a number of ports in four basins is being explored: the Baltic, the North Sea, the Mediterranean basin, and the ports of the western Black Sea coast.

Ukraine is currently unifying and simplifying customs procedures with our western neighbors, including European Commission members Romania, Hungary, Slovakia, and Poland, as well as Moldova to establish exports. At the same time, **there is no physical alternative** to seaports for export.

The issue of unblocking ports for humanitarian purposes, namely the avoidance of hunger**, is a priority for all**: the United States, the European Union, Britain, Africa, and the Middle East. In 2022, **Ukraine needs to export only 80 million tons of wheat**, and the **only option is through Odessa.**

Currently, the **world** has stocks of wheat in warehouses for **about ten weeks**. The first reason is Russia’s aggression against Ukraine and the blockade of ports, the second is because India has banned its exports in recent weeks.

In Europe, support is growing for a naval operation to export Ukrainian grain, which involves escorting Ukrainian grain ships by warships in the Black Sea. The United Kingdom is negotiating with its allies to send a navy to the Black Sea to protect ships loaded with Ukrainian grain.

Lithuania [proposes](https://www.eurointegration.com.ua/news/2022/05/23/7139912/) to create a naval coalition to lift the Russian blockade on Ukrainian grain exports across the Black Sea. A non-NATO naval escort operation could protect grain ships as they cross the Black Sea and past Russian warships. This plan **requires de-mining** of parts of the Black Sea **to ensure safe passage**, as well as an agreement with Turkey, which protects entrance into the country’s waters.

Restoring Ukraine’s seaports is the **only** way to **reduce food prices and avoid a humanitarian catastrophe**—**famine in the Middle East and North Africa**, which are the main importers of food from Ukraine.

**This directly increases the chances of African Conflict – Ukraine puts prices on the brink.**

**Eziakonwa 22** [[Ahunna Eziakonwa](https://www.weforum.org/agenda/authors/ahunna-eziakonwa) is a UNDP Regional Bureau for Africa and UN Assistant Secretary General, 5-16-2022, Averting an African food crisis caused by the war in Ukraine, https://www.weforum.org/agenda/2022/05/averting-an-african-food-crisis-in-the-wake-of-the-ukraine-war/] Eric

Fourteen African countries depend on Russia and Ukraine for [more than half](https://www.fao.org/3/cb9013en/cb9013en.pdf) of their **wheat imports**, while almost **half the continent** depends on imports for **more than a third of** their wheat. Apart from the looming supply constraints, this crisis has **already pushed food grain prices** [up by more than **25%**](https://www.straitstimes.com/business/companies-markets/ukraine-war-sends-wheat-prices-soaring-30-this-week-to-14-year-high) in a matter of weeks. Some countries are bracing for supply shortfalls.

In the wake of the COVID-19 pandemic and its devastating socio-economic impact across Africa, the crisis in Ukraine **threatens to place an inordinate burden** on African households — many of which were already struggling to put food on the table. Wandile Sihlobo, Chief Economist at the Agricultural Business Chamber of South Africa, anticipates critical [short-term supply and pricing effects](https://www.kvoa.com/_services/v1/client_captcha/challenge?request=X2xiX3JhdGVfZm9yZWlnbjpMM1J2ZDI1dVpYZHpMMk52YlcxbGNtTmxMMmhwWjJobGNpMW1iMjlrTFhCeWFXTmxjeTFoYm1RdGMyeDFiWEJwYm1jdGRISmhaR1V0YUc5M0xYUm9aUzEzWVhJdGFXNHRkV3R5WVdsdVpTMWpiM1ZzWkMxb2FYUXRZV1p5YVdOaEwyRnlkR2xqYkdWZk1HSmtObUprWXpJdE5UWmxaUzAxTkRFMUxUaGtObUl0WXpnNU5qbGhZV1l6T1dSaUxtaDBiV3c6MTY1MTA2MTQ5NToweGY1MWZmZmQzYjZiYmYzZTA2Nzk3NTEyMDU1M2I4NzQ1ZWViYjY5MWU) — a **food crisis** — **unless** the conflict is resolved expeditiously.

Higher food prices mean that fewer African households will be able to afford a single decent daily meal. Malnourishment will rise. Africa’s food-insecure households will be left much further behind. Their consumption rates will fall, savings will be depleted, debt will increase, and assets will be liquidated.

In short, **in a food crisis**, millions will be in danger of malnutrition and deepened poverty.

Some African countries, such as Ethiopia, Nigeria, and South Africa, have domestic price controls and export restrictions in place. Benin has instituted an export ban. Others — such as [Malawi, Zambia](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Facademic.oup.com%2Fwber%2Farticle%2F34%2F3%2F670%2F5611144&data=04%7C01%7Ceve.sabbagh%40undp.org%7C70a628a6e90b4e9e42d908da17412e39%7Cb3e5db5e2944483799f57488ace54319%7C0%7C0%7C637847865956030987%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=WXgBWUUIs087tIUHobQk5N6ydaWIkGXcUSHzzAA1EWo%3D&reserved=0), and Uganda — offer cash subsidies to vulnerable groups. But with the sharp rise in fuel and energy prices, another consequence of the situation in Ukraine, very few African countries will have the fiscal space to sustain such policies, even if they wished to pursue them.

Food crisis and human security

Food insecurity in Africa is not just a socioeconomic issue. It is also a matter of human security.

Rather than wars and insurgencies, riots and protests now account for over half of violent events in Africa, according to data from the Armed Conflict Location & Event Data ([ACLED](https://acleddata.com/curated-data-files/)). Recent violent protests sparked by domestic price increases in Sierra Leone illustrate how inflationary pressures **can easily foment instability**. Recall, too, how the Arab revolts in the early 2010s sparked protests across North Africa.

High food prices typically hit the most vulnerable households hardest, making them “multidimensionally poor,” meaning they lack not just income but also access to electricity, cooking fuel, and basic social services. Shrinking budgets will cause households to dispose of their assets, eroding their ability to cushion themselves against future shocks. These indirect effects of the food crisis **will constrain economic activity, widen inequalities, and could trigger social tensions and unrest.**

**Africa instability escalates**

Walter **Mead** **13**. James Clarke Chace Professor of Foreign Affairs and Humanities, Bard College. “Peace in The Congo? Why the World Should Care.” The American Interest. 12-15-2013. <https://www.the-american-interest.com/2013/12/15/peace-in-the-congo-why-the-world-should-care/>

One of the **biggest questions of the 21st century** is whether this **destructive dynamic** can be contained, or whether the demand for ethnic, cultural and/or religious homogeneity will continue to **convulse world politics**, **drive new generations of conflict**, and **create millions more victims**. The **Congo conflict** is a disturbing piece of evidence **suggest**ing that, in Africa at least, there is potential for this kind of conflict. The Congo war (and the long Hutu-Tutsi conflict in neighboring countries) is not, unfortunately alone. The secession of South Sudan from Sudan proper, the wars in what remains of that unhappy country, the secession of Eritrea from Ethiopia and the rise of Christian-Muslim tension right across Africa (where religious conflict often is fed by and intensifies “tribal”—in Europe we would say “ethnic” or “national”—conflicts) are strong indications that the potential for **huge and destructive conflict** across Africa is very real.

But one must look beyond Africa. The Middle East of course is aflame in religious and ethnic conflict. The old British Raj including India, Pakistan, Bangladesh, Burma and Sri Lanka offers countless examples of ethnic and religious conflict that sometimes is contained, and sometimes boils to the surface in horrendous acts of violence.

Beyond that, rival nationalisms in East and Southeast Asia are keeping the world awake at night.

The Congo war should be a reminder to us all that the **foundations of our world are dynamite**, and that the potential for new conflicts on the **scale of the horrific wars of the 20th century** is very much with us today.

The second lesson from this conflict stems from the realization of how much patience and commitment from the international community (which in this case included the Atlantic democracies and a coalition of African states working as individual countries and through various international institutions) it has taken to get this far towards peace. Particularly at a time when many Americans want the US to turn inwards, there are people who make the argument that it is really none of America’s business to invest time and energy in the often thankless task of solving these conflicts.

That might be an ugly but defensible position if we didn’t live in such a tinderbox world. Someone could rationally say, yes, it’s terrible that a million plus people are being killed overseas in a horrific conflict, but the war is really very far away and America has urgent needs at home and we should husband the resources we have available for foreign policy on things that have more power to affect us directly.

The problem is that these wars **spread**. They may start in places that we don’t care much about (most Americans didn’t give a rat’s patootie about whether Germany controlled the Sudetenland in 1938 or Danzig in 1939) but they tend to spread to places that we do care very much about. This can be because a revisionist great power like Germany in 1938-39 needs to overturn the balance of power in Europe to achieve its goals, or it can be because instability in a very remote place triggers problems in places that we care about very much. Out of Afghanistan in 2001 came both 9/11 and the waves of insurgency and instability that threaten to **rip nuclear-armed Pakistan apart** or **with trigger wider conflict India**. Out of the mess in Syria a witches’ brew of terrorism and religious conflict looks set to complicate the security of our allies in Europe and the Middle East and even the security of the oil supply on which the world economy so profoundly depends.

**Africa**, and the potential for upheaval there, is of **more importance to American security** than many people may understand. The line **between Africa and the Middle East** is a soft one. The **weak states** that straddle the southern approaches of the Sahara are **ideal petri dishes** for **Al Qaeda type groups** to form and attract local support. There are **networks** of funding and religious contact that give groups in these countries potential access to **funds**, **fighters**, **training** and **weapons** from the Middle East. A **war in the eastern Congo** might not directly trigger these other conflicts, but it helps to create the **swirling underworld** of arms trading, money transfers, illegal commerce and the rise of a generation of young men who become **experienced fighters**—and know no other way to make a living. It **destabilizes** the environment for neighboring states (like Uganda and Kenya) that play much more direct role in potential crises of greater concern to us.

**AND the middle east**

**Turak 22** [Natasha Turak is a Correspondent at CNBC, 3-9-2022, Russia’s war is threatening the Middle East’s food security — sparking warnings of riots, famine, and mass migration, CNBC, https://www.cnbc.com/2022/04/28/russia-ukraine-war-threatens-the-middle-easts-food-security.html] Eric

DUBAI, United Arab Emirates — For centuries, bread **has been the lifeblood of civilization.** Riots and revolutions have been sparked over the availability of this basic dietary staple — and over food prices more broadly, **particularly** when it comes to **the Middle East and North Africa**.

Russia’s unprovoked invasion of Ukraine now threatens a huge proportion of the wheat and grain that these countries rely on. Together, [Russia and Ukraine account for roughly one-third of the world’s global wheat exports](https://www.atlanticcouncil.org/blogs/econographics/putins-invasion-of-ukraine-could-spark-a-global-food-crisis/), nearly 20% of its corn, and 80% of its sunflower oil — and they provide the majority of the MENA region’s supply.

Wheat futures are up 30% since the invasion began in late February.

Before the war, more than **95% of Ukraine’s total grain**, wheat and corn exports was shipped out via the Black Sea, and **half of those exports went to MENA countries.** That vital conduit **is now shut,** choking off Ukraine’s maritime trade after its ports came under attack from Russia’s military.

The country is now trying to export some of its produce by rail, which has enormous logistical limits, while Ukrainian farmers whose infrastructure hasn’t been destroyed attempt to till their fields wearing bulletproof vests.

Russia is the world’s number one exporter of wheat, as well as – crucially – the top exporter of fertilizer. Fears of getting caught up in western sanctions on Moscow have already disrupted Russia’s exports, too.

Inflation and popular unrest

**All of this is turbocharging** the **rising inflation** that’s hitting the population of roughly 500 million people, particularly its poorest and those already facing high unemployment and worsening economic prospects.

“Inflation and economics, more than political freedom, are key” for the region’s stability, Kamal Alam, a non-resident senior fellow at the Atlantic Council, told CNBC.

Alam pointed to the self-immolation of Mohammed Bouazizi, the young Tunisian street vendor whose act of protest set off the Arab Spring protests of 2011.

“Even the vendor who burned himself in Tunis did so because of economic indignation, not (then-Tunisian president) Ben Ali,” he said. “One would argue the first and foremost reason for unrest in the Arab world is always lack of economic mobility.”

Inflation surged to 14.8% in the MENA region in 2021, according to the International Monetary Fund. Already at that point, higher food prices were the main driver — making up about 60% of the increase in the region, excluding the oil-rich Gulf Cooperation Council states.

That was before the war in Ukraine began. Now, the U.N. says that food prices as of April are 34% higher than they were one year ago.

“We’ve got now 45 million people in 38 countries that are **knocking on famine’s door**,” David Beasley, executive director of the U.N.’s World Food Programme, told CBS in an interview last week. “And you may see a general price increase of food, let’s say 38 to 40%, but in some of the very tough places, it’s going to be 100, 200% like in Syria.”

While countries will be looking for alternative sources for their crucial food imports, surging global inflation and potential export restrictions make switching expensive. And water scarcity across the MENA region means local agricultural production is very limited.

Warnings of riots, famine and mass migration

Egypt, the Arab world’s most populous country, alone imports 80% of its wheat from Ukraine and Russia. Lebanon, already years into a crippling debt and inflation crisis, imports 60% of its wheat from the two warring countries, which provide 80% of Tunisia’s grain.

Egypt “**has a lot to lose from the war** as its bread subsidies program reaches over half of the population and forms a pillar of the social contract that maintains stability in the most populous Arab state,” said Amer Alhussein, economic development expert and advisor for the post-conflict initiative Plant for Peace.

This, he says, could explain why Egypt’s wealthy Gulf allies have rushed to its aid with billions of dollars in funds for its central bank and other investments to boost its economy.

While Egypt’s government can keep borrowing money, rising interest rates in major economies and weak appetite for emerging market bonds will weigh heavily on the country “and may become a sovereign risk factor and lead to a default that would have a catastrophic impact on its population,” Alhussein added.

Lebanon, meanwhile, is facing “**many warnings of an impending famine**,” Alhussein said. “The current situation could very soon develop into protests and riots like the ones that took place in 2019, but with a much more violent impact given the ever-worsening standard of life and food security in the country.”

Further, higher wheat prices alone “can increase (the Middle East’s) external financing needs by up to $10 billion in 2022,” the IMF wrote in its latest Middle East and Central Asia Regional Economic Outlook released Wednesday. “Supply shortages originating from Russia and Ukraine can **endanger food security**, **particularly for low-income countries**, as they may also suffer from potential aid diversion.”

About a quarter of Ukraine’s latest pre-invasion wheat harvest is still available on markets, but that will last roughly three months, analysts say.

This fall, the WFP’s Beasley warns, is when the war’s impact will really hit MENA, in a crisis that he believes could trigger mass migration.

“If you think we’ve got hell on earth now, **you just get ready,”** Beasley [warned in an interview](https://www.politico.eu/article/world-food-programme-eu-fund-us-food-aid-ukraine-russia/) with Politico in March. “If we neglect northern Africa, northern Africa’s coming to Europe. If we neglect the Middle East, **the Middle East is coming to Europe.”**

Taufiq Rahim, a Dubai-based senior fellow in the international security program at think tank New America, agreed that the worst may be yet to come.

“At a time of rising inflation, increased commodity prices and supply chain gridlocks, the wider region could be in for an unprecedented economic shock this summer,” Rahim told CNBC.

**“A new political Pandora’s box will be opened by the rising economic discontent and we will see governments under increasing pressure.”**

**Middle East war goes global AND nuclear.**

**Pleasance 20**, senior foreign news reporter with dailymail (Chris, January 3rd, 2020, “How could Iran crisis lead to World War Three? Tehran could hit back with cyber-attacks or terror attacks on US forces and Israel - provoking Donald Trump to retaliate in tit-for-tat that could drag in Saudi Arabia, Russia, China and Turkey”, <https://www.dailymail.co.uk/news/article-7848703/How-Iran-crisis-lead-World-War-Three.html>)

Iran has vowed to exact a 'crushing revenge' on American forces in retaliation for the killing of Quds commander Qassem Soleimani - leaving the Middle East on the brink of a **conflict** that could quickly spiral into **World War 3.** The Iranian National Security Council is currently meeting in Tehran - chaired by Ayatollah Khamenei himself for the first time ever - to consider its response. At their disposal is the world's 13th most powerful military, a host of militia groups spread across the Middle East, proxy-forces such as Lebanon's Hezbollah and Yemen's Houthi rebels, and allies like Syria's Bashar al-Assad. Targets in their crosshairs are likely to include US troops and military bases in Iraq and Syria, Israeli forces in the Golan Heights, tankers in the Strait of Hormuz, and Saudi Arabia's oil infrastructure. While initial strikes are likely to be limited, they could herald a **tit-for-tat series of events** - drawing in Russian forces stationed in Syria defending a key Iranian ally in Bashar al-Assad, and Turkish forces fighting in the country's north. China also has ships stationed in the Gulf of Oman and recently carried out joint naval drill with both Iran and Russia, raising the prospect that they could also become involved. Saudi Arabia is already engaged in a conflict with Iran-backed Houthi rebels in Yemen, and any escalation by Tehran would be met with a response from Riyadh. Turkish strongman Recep Erdogan's troops are deployed in northern Syria and he is close to Russia and Iran as well as being a member of NATO - making his actions unpredictable if a conflict escalates across the region. The US, China, Russia and Israel all have **nuclear weapons** - with at least three of those possessing **next-generation hypersonic missiles** capable of breaching all defense systems. Israel is also armed with nuclear weapons and is an obvious target for any Iranian attacks, but Benjamin Netanyahu and the IDF will not hesitate to defend themselves and have recently struck Iran-backed Hezbollah forces in Syria. If Iran decides to blockade the Strait of Hormuz, as it has often threatened to do in the past, a host of world powers including European nations which rely on the oil which flows through the waterway could find themselves having to defend their interests. Ultimately, if the tit-for-tat exchanges between these countries escalated far enough it is conceivable but unlikely that it would end with a **nuclear exchange** - and **destruction on a global scale.**

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In Europe, support is growing for a naval operation to export Ukrainian grain, which involves escorting Ukrainian grain ships by warships in the Black Sea. The United Kingdom is negotiating with its allies to send a navy to the Black Sea to protect ships loaded with Ukrainian grain.

Lithuania [proposes](https://www.eurointegration.com.ua/news/2022/05/23/7139912/) to create a naval coalition to lift the Russian blockade on Ukrainian grain exports across the Black Sea. A non-NATO naval escort operation could protect grain ships as they cross the Black Sea and past Russian warships. This plan **requires de-mining** of parts of the Black Sea **to ensure safe passage**, as well as an agreement with Turkey, which protects entrance into the country’s waters.

Restoring Ukraine’s seaports is the **only** way to **reduce food prices and avoid a humanitarian catastrophe**—**famine in the Middle East and North Africa**, which are the main importers of food from Ukraine.

**This directly increases the chances of African Conflict – Ukraine puts prices on the brink.**

**Eziakonwa 22** [[Ahunna Eziakonwa](https://www.weforum.org/agenda/authors/ahunna-eziakonwa) is a UNDP Regional Bureau for Africa and UN Assistant Secretary General, 5-16-2022, Averting an African food crisis caused by the war in Ukraine, https://www.weforum.org/agenda/2022/05/averting-an-african-food-crisis-in-the-wake-of-the-ukraine-war/] Eric

Fourteen African countries depend on Russia and Ukraine for [more than half](https://www.fao.org/3/cb9013en/cb9013en.pdf) of their **wheat imports**, while almost **half the continent** depends on imports for **more than a third of** their wheat. Apart from the looming supply constraints, this crisis has **already pushed food grain prices** [up by more than **25%**](https://www.straitstimes.com/business/companies-markets/ukraine-war-sends-wheat-prices-soaring-30-this-week-to-14-year-high) in a matter of weeks. Some countries are bracing for supply shortfalls.

In the wake of the COVID-19 pandemic and its devastating socio-economic impact across Africa, the crisis in Ukraine **threatens to place an inordinate burden** on African households — many of which were already struggling to put food on the table. Wandile Sihlobo, Chief Economist at the Agricultural Business Chamber of South Africa, anticipates critical [short-term supply and pricing effects](https://www.kvoa.com/_services/v1/client_captcha/challenge?request=X2xiX3JhdGVfZm9yZWlnbjpMM1J2ZDI1dVpYZHpMMk52YlcxbGNtTmxMMmhwWjJobGNpMW1iMjlrTFhCeWFXTmxjeTFoYm1RdGMyeDFiWEJwYm1jdGRISmhaR1V0YUc5M0xYUm9aUzEzWVhJdGFXNHRkV3R5WVdsdVpTMWpiM1ZzWkMxb2FYUXRZV1p5YVdOaEwyRnlkR2xqYkdWZk1HSmtObUprWXpJdE5UWmxaUzAxTkRFMUxUaGtObUl0WXpnNU5qbGhZV1l6T1dSaUxtaDBiV3c6MTY1MTA2MTQ5NToweGY1MWZmZmQzYjZiYmYzZTA2Nzk3NTEyMDU1M2I4NzQ1ZWViYjY5MWU) — a **food crisis** — **unless** the conflict is resolved expeditiously.

Higher food prices mean that fewer African households will be able to afford a single decent daily meal. Malnourishment will rise. Africa’s food-insecure households will be left much further behind. Their consumption rates will fall, savings will be depleted, debt will increase, and assets will be liquidated.

In short, **in a food crisis**, millions will be in danger of malnutrition and deepened poverty.

Some African countries, such as Ethiopia, Nigeria, and South Africa, have domestic price controls and export restrictions in place. Benin has instituted an export ban. Others — such as [Malawi, Zambia](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Facademic.oup.com%2Fwber%2Farticle%2F34%2F3%2F670%2F5611144&data=04%7C01%7Ceve.sabbagh%40undp.org%7C70a628a6e90b4e9e42d908da17412e39%7Cb3e5db5e2944483799f57488ace54319%7C0%7C0%7C637847865956030987%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=WXgBWUUIs087tIUHobQk5N6ydaWIkGXcUSHzzAA1EWo%3D&reserved=0), and Uganda — offer cash subsidies to vulnerable groups. But with the sharp rise in fuel and energy prices, another consequence of the situation in Ukraine, very few African countries will have the fiscal space to sustain such policies, even if they wished to pursue them.

Food crisis and human security

Food insecurity in Africa is not just a socioeconomic issue. It is also a matter of human security.

Rather than wars and insurgencies, riots and protests now account for over half of violent events in Africa, according to data from the Armed Conflict Location & Event Data ([ACLED](https://acleddata.com/curated-data-files/)). Recent violent protests sparked by domestic price increases in Sierra Leone illustrate how inflationary pressures **can easily foment instability**. Recall, too, how the Arab revolts in the early 2010s sparked protests across North Africa.

High food prices typically hit the most vulnerable households hardest, making them “multidimensionally poor,” meaning they lack not just income but also access to electricity, cooking fuel, and basic social services. Shrinking budgets will cause households to dispose of their assets, eroding their ability to cushion themselves against future shocks. These indirect effects of the food crisis **will constrain economic activity, widen inequalities, and could trigger social tensions and unrest.**

**Africa instability escalates**

Walter **Mead** **13**. James Clarke Chace Professor of Foreign Affairs and Humanities, Bard College. “Peace in The Congo? Why the World Should Care.” The American Interest. 12-15-2013. <https://www.the-american-interest.com/2013/12/15/peace-in-the-congo-why-the-world-should-care/>

One of the **biggest questions of the 21st century** is whether this **destructive dynamic** can be contained, or whether the demand for ethnic, cultural and/or religious homogeneity will continue to **convulse world politics**, **drive new generations of conflict**, and **create millions more victims**. The **Congo conflict** is a disturbing piece of evidence **suggest**ing that, in Africa at least, there is potential for this kind of conflict. The Congo war (and the long Hutu-Tutsi conflict in neighboring countries) is not, unfortunately alone. The secession of South Sudan from Sudan proper, the wars in what remains of that unhappy country, the secession of Eritrea from Ethiopia and the rise of Christian-Muslim tension right across Africa (where religious conflict often is fed by and intensifies “tribal”—in Europe we would say “ethnic” or “national”—conflicts) are strong indications that the potential for **huge and destructive conflict** across Africa is very real.

But one must look beyond Africa. The Middle East of course is aflame in religious and ethnic conflict. The old British Raj including India, Pakistan, Bangladesh, Burma and Sri Lanka offers countless examples of ethnic and religious conflict that sometimes is contained, and sometimes boils to the surface in horrendous acts of violence.

Beyond that, rival nationalisms in East and Southeast Asia are keeping the world awake at night.

The Congo war should be a reminder to us all that the **foundations of our world are dynamite**, and that the potential for new conflicts on the **scale of the horrific wars of the 20th century** is very much with us today.

The second lesson from this conflict stems from the realization of how much patience and commitment from the international community (which in this case included the Atlantic democracies and a coalition of African states working as individual countries and through various international institutions) it has taken to get this far towards peace. Particularly at a time when many Americans want the US to turn inwards, there are people who make the argument that it is really none of America’s business to invest time and energy in the often thankless task of solving these conflicts.

That might be an ugly but defensible position if we didn’t live in such a tinderbox world. Someone could rationally say, yes, it’s terrible that a million plus people are being killed overseas in a horrific conflict, but the war is really very far away and America has urgent needs at home and we should husband the resources we have available for foreign policy on things that have more power to affect us directly.

The problem is that these wars **spread**. They may start in places that we don’t care much about (most Americans didn’t give a rat’s patootie about whether Germany controlled the Sudetenland in 1938 or Danzig in 1939) but they tend to spread to places that we do care very much about. This can be because a revisionist great power like Germany in 1938-39 needs to overturn the balance of power in Europe to achieve its goals, or it can be because instability in a very remote place triggers problems in places that we care about very much. Out of Afghanistan in 2001 came both 9/11 and the waves of insurgency and instability that threaten to **rip nuclear-armed Pakistan apart** or **with trigger wider conflict India**. Out of the mess in Syria a witches’ brew of terrorism and religious conflict looks set to complicate the security of our allies in Europe and the Middle East and even the security of the oil supply on which the world economy so profoundly depends.

**Africa**, and the potential for upheaval there, is of **more importance to American security** than many people may understand. The line **between Africa and the Middle East** is a soft one. The **weak states** that straddle the southern approaches of the Sahara are **ideal petri dishes** for **Al Qaeda type groups** to form and attract local support. There are **networks** of funding and religious contact that give groups in these countries potential access to **funds**, **fighters**, **training** and **weapons** from the Middle East. A **war in the eastern Congo** might not directly trigger these other conflicts, but it helps to create the **swirling underworld** of arms trading, money transfers, illegal commerce and the rise of a generation of young men who become **experienced fighters**—and know no other way to make a living. It **destabilizes** the environment for neighboring states (like Uganda and Kenya) that play much more direct role in potential crises of greater concern to us.

**AND the middle east**

**Turak 22** [Natasha Turak is a Correspondent at CNBC, 3-9-2022, Russia’s war is threatening the Middle East’s food security — sparking warnings of riots, famine, and mass migration, CNBC, https://www.cnbc.com/2022/04/28/russia-ukraine-war-threatens-the-middle-easts-food-security.html] Eric

DUBAI, United Arab Emirates — For centuries, bread **has been the lifeblood of civilization.** Riots and revolutions have been sparked over the availability of this basic dietary staple — and over food prices more broadly, **particularly** when it comes to **the Middle East and North Africa**.

Russia’s unprovoked invasion of Ukraine now threatens a huge proportion of the wheat and grain that these countries rely on. Together, [Russia and Ukraine account for roughly one-third of the world’s global wheat exports](https://www.atlanticcouncil.org/blogs/econographics/putins-invasion-of-ukraine-could-spark-a-global-food-crisis/), nearly 20% of its corn, and 80% of its sunflower oil — and they provide the majority of the MENA region’s supply.

Wheat futures are up 30% since the invasion began in late February.

Before the war, more than **95% of Ukraine’s total grain**, wheat and corn exports was shipped out via the Black Sea, and **half of those exports went to MENA countries.** That vital conduit **is now shut,** choking off Ukraine’s maritime trade after its ports came under attack from Russia’s military.

The country is now trying to export some of its produce by rail, which has enormous logistical limits, while Ukrainian farmers whose infrastructure hasn’t been destroyed attempt to till their fields wearing bulletproof vests.

Russia is the world’s number one exporter of wheat, as well as – crucially – the top exporter of fertilizer. Fears of getting caught up in western sanctions on Moscow have already disrupted Russia’s exports, too.

Inflation and popular unrest

**All of this is turbocharging** the **rising inflation** that’s hitting the population of roughly 500 million people, particularly its poorest and those already facing high unemployment and worsening economic prospects.

“Inflation and economics, more than political freedom, are key” for the region’s stability, Kamal Alam, a non-resident senior fellow at the Atlantic Council, told CNBC.

Alam pointed to the self-immolation of Mohammed Bouazizi, the young Tunisian street vendor whose act of protest set off the Arab Spring protests of 2011.

“Even the vendor who burned himself in Tunis did so because of economic indignation, not (then-Tunisian president) Ben Ali,” he said. “One would argue the first and foremost reason for unrest in the Arab world is always lack of economic mobility.”

Inflation surged to 14.8% in the MENA region in 2021, according to the International Monetary Fund. Already at that point, higher food prices were the main driver — making up about 60% of the increase in the region, excluding the oil-rich Gulf Cooperation Council states.

That was before the war in Ukraine began. Now, the U.N. says that food prices as of April are 34% higher than they were one year ago.

“We’ve got now 45 million people in 38 countries that are **knocking on famine’s door**,” David Beasley, executive director of the U.N.’s World Food Programme, told CBS in an interview last week. “And you may see a general price increase of food, let’s say 38 to 40%, but in some of the very tough places, it’s going to be 100, 200% like in Syria.”

While countries will be looking for alternative sources for their crucial food imports, surging global inflation and potential export restrictions make switching expensive. And water scarcity across the MENA region means local agricultural production is very limited.

Warnings of riots, famine and mass migration

Egypt, the Arab world’s most populous country, alone imports 80% of its wheat from Ukraine and Russia. Lebanon, already years into a crippling debt and inflation crisis, imports 60% of its wheat from the two warring countries, which provide 80% of Tunisia’s grain.

Egypt “**has a lot to lose from the war** as its bread subsidies program reaches over half of the population and forms a pillar of the social contract that maintains stability in the most populous Arab state,” said Amer Alhussein, economic development expert and advisor for the post-conflict initiative Plant for Peace.

This, he says, could explain why Egypt’s wealthy Gulf allies have rushed to its aid with billions of dollars in funds for its central bank and other investments to boost its economy.

While Egypt’s government can keep borrowing money, rising interest rates in major economies and weak appetite for emerging market bonds will weigh heavily on the country “and may become a sovereign risk factor and lead to a default that would have a catastrophic impact on its population,” Alhussein added.

Lebanon, meanwhile, is facing “**many warnings of an impending famine**,” Alhussein said. “The current situation could very soon develop into protests and riots like the ones that took place in 2019, but with a much more violent impact given the ever-worsening standard of life and food security in the country.”

Further, higher wheat prices alone “can increase (the Middle East’s) external financing needs by up to $10 billion in 2022,” the IMF wrote in its latest Middle East and Central Asia Regional Economic Outlook released Wednesday. “Supply shortages originating from Russia and Ukraine can **endanger food security**, **particularly for low-income countries**, as they may also suffer from potential aid diversion.”

About a quarter of Ukraine’s latest pre-invasion wheat harvest is still available on markets, but that will last roughly three months, analysts say.

This fall, the WFP’s Beasley warns, is when the war’s impact will really hit MENA, in a crisis that he believes could trigger mass migration.

“If you think we’ve got hell on earth now, **you just get ready,”** Beasley [warned in an interview](https://www.politico.eu/article/world-food-programme-eu-fund-us-food-aid-ukraine-russia/) with Politico in March. “If we neglect northern Africa, northern Africa’s coming to Europe. If we neglect the Middle East, **the Middle East is coming to Europe.”**

Taufiq Rahim, a Dubai-based senior fellow in the international security program at think tank New America, agreed that the worst may be yet to come.

“At a time of rising inflation, increased commodity prices and supply chain gridlocks, the wider region could be in for an unprecedented economic shock this summer,” Rahim told CNBC.

**“A new political Pandora’s box will be opened by the rising economic discontent and we will see governments under increasing pressure.”**

**Middle East war goes global AND nuclear.**

**Pleasance 20**, senior foreign news reporter with dailymail (Chris, January 3rd, 2020, “How could Iran crisis lead to World War Three? Tehran could hit back with cyber-attacks or terror attacks on US forces and Israel - provoking Donald Trump to retaliate in tit-for-tat that could drag in Saudi Arabia, Russia, China and Turkey”, <https://www.dailymail.co.uk/news/article-7848703/How-Iran-crisis-lead-World-War-Three.html>)

Iran has vowed to exact a 'crushing revenge' on American forces in retaliation for the killing of Quds commander Qassem Soleimani - leaving the Middle East on the brink of a **conflict** that could quickly spiral into **World War 3.** The Iranian National Security Council is currently meeting in Tehran - chaired by Ayatollah Khamenei himself for the first time ever - to consider its response. At their disposal is the world's 13th most powerful military, a host of militia groups spread across the Middle East, proxy-forces such as Lebanon's Hezbollah and Yemen's Houthi rebels, and allies like Syria's Bashar al-Assad. Targets in their crosshairs are likely to include US troops and military bases in Iraq and Syria, Israeli forces in the Golan Heights, tankers in the Strait of Hormuz, and Saudi Arabia's oil infrastructure. While initial strikes are likely to be limited, they could herald a **tit-for-tat series of events** - drawing in Russian forces stationed in Syria defending a key Iranian ally in Bashar al-Assad, and Turkish forces fighting in the country's north. China also has ships stationed in the Gulf of Oman and recently carried out joint naval drill with both Iran and Russia, raising the prospect that they could also become involved. Saudi Arabia is already engaged in a conflict with Iran-backed Houthi rebels in Yemen, and any escalation by Tehran would be met with a response from Riyadh. Turkish strongman Recep Erdogan's troops are deployed in northern Syria and he is close to Russia and Iran as well as being a member of NATO - making his actions unpredictable if a conflict escalates across the region. The US, China, Russia and Israel all have **nuclear weapons** - with at least three of those possessing **next-generation hypersonic missiles** capable of breaching all defense systems. Israel is also armed with nuclear weapons and is an obvious target for any Iranian attacks, but Benjamin Netanyahu and the IDF will not hesitate to defend themselves and have recently struck Iran-backed Hezbollah forces in Syria. If Iran decides to blockade the Strait of Hormuz, as it has often threatened to do in the past, a host of world powers including European nations which rely on the oil which flows through the waterway could find themselves having to defend their interests. Ultimately, if the tit-for-tat exchanges between these countries escalated far enough it is conceivable but unlikely that it would end with a **nuclear exchange** - and **destruction on a global scale.**

**Ukraine export shortage trigger catastrophic shortages---no defense because of converging factors and countries aren’t working together**

**Bankova et al 22**, Dea Bankova is a London-based developer and designer focusing on visualisation and visual storytelling through data currently working as a Graphics Journalist at Reuters with past experience spanning both industry and academia, and she has a background in mathematics and machine learning, [Prasanta Kumar Dutta](https://twitter.com/Da_Pacific) is an award-winning information designer, crafting visual stories with data and solving problems in an aesthetically pleasing way, Michael Ovaska is a graphics news editor at Reuters, 5/30/22, “**The war in Ukraine is fuelling a global food crisis**,” *Reuters*, <https://graphics.reuters.com/UKRAINE-CRISIS/FOOD/zjvqkgomjvx/>, JH

**Russia's invasion of Ukraine in late February dramatically worsened** the outlook for already inflated **global food prices**.

The halt in Ukrainian exports following the outbreak of the conflict pushed the Food and Agriculture Organization's (FAO) food price index, which tracks international prices of the most globally traded food commodities, to its highest point in March since records began in 1990.

Russia's invasion of Ukraine, a move Russia calls a "special operation" to demilitarise its neighbour, is the latest development in a growing global food crisis.

**While post-pandemic global demand, extreme weather, tightening food stocks, high energy prices, supply chain bottlenecks and export restrictions and taxes have been straining the food market for two years**, the recent convergence of all these factors following Russia’s invasion is unprecedented and has sent food inflation rates spiking around the world.

In Europe, the Consumer Price Index for food has sharply risen in all of the continent’s largest economies, while in the United States the CPI climbed more than 14 percentage points since January 2020.

In developing and emerging market countries, the index change is even more dramatic, leaving consumers facing much higher prices for essential food staples.

The most extreme examples have seen food inflation rise hundreds of points. Lebanon, a country that is heavily reliant on food imports including most of its wheat from Ukraine, saw the price index rise more than 3,000 percentage points since 2020.

In many developing nations, food is the single largest category in the overall Consumer Price Index — the selection of goods economists use to calculate people's overall cost of living. It accounts for about 40% on average, while **it rises to half the total cost of living for consumers in India and Pakistan**, International Monetary Fund data shows.

**Rising prices for basic food items have already fueled**[**protests in countries around the world**](https://www.reuters.com/markets/commodities/surging-food-prices-fuel-protests-across-developing-world-2022-05-18/), including Argentina, Indonesia and Greece. In Iran, protestors took to the streets after prices for flour-based staples rose as much as 300%.

The war has disrupted global agricultural exports from Russia and Ukraine, **two grain exporting powerhouses that accounted for 24% of global wheat exports by trade value, 57% of sunflower seed oil exports and 14% of corn from 2016 to 2020**, according to data from UN Comtrade.

In the 8 months before the invasion, 51 million metric tons of grain passed through Ukraine’s seven Black Sea ports, according to the United Nations’ World **Food** Programme (WFP).

Since the invasion, much of Ukraine’s current export grain stock has been stuck in the war-torn country **because of closed ports and Russian blockades in the Black Sea**. Those blockages also mean there won’t be sufficient storage available when the 2022 harvest comes in, according to the WFP.

**The shortfall could have devastating consequences for many countries who relied on Ukraine and Russia** for as much as half of their wheat imports from 2016 to 2020, including Egypt, who recently made a deal with India to help replace some of the 80% of its wheat imports which come from Russia and Ukraine.

In Europe, the war in Ukraine has mangled major shipping lines through the Baltic and Black Seas, and several key European countries have also banned Russian-flagged vessels from their ports, blocking some Russian grains.

The acute effects of the conflict have only added to global transport issues. An early May study by analysts at Royal Bank of Canada (RBC) found that one-fifth of the global container ship fleet was currently stuck in congestion at various major ports.

**Global supply chain problems look set to worsen as China's COVID-19 lockdowns**, Russia's invasion of Ukraine and other strains cause even longer delays at ports and drive up shipping costs.

**With food prices rocketing, a growing list of key producing countries are limiting exports to stabilise prices** and protect local markets.

According to data from David Laborde Debucquet and Abdullah Mamun at the International Food Policy Research Institute (IFPRI), restrictions on food and food-related commodities in 2022 could impact as much as 17% of globally traded calories.

Since Russia’s invasion of Ukraine, **over 20 countries around the world have imposed restrictions** on food exports, including export licences and taxes as well as outright bans.

IFPRI data show that more than two thirds of those restrictions targeted grain exports, such as wheat, rye and barley.

In late April**, Indonesia banned most exports of palm oil** to protect domestic supplies of cooking oil. The ban shut out the rest of the world from the largest producer of the edible oil, used in everything from cakes to margarine.

**India's May ban on wheat exports delivered a fresh blow to world markets**, as a scorching heat wave in the country curtailed output and domestic prices hit a record high.

The impact of recent export bans has **also rippled into the energy market.**

Cereals and vegetable oils are major components of biofuels, demand for which has ballooned as countries try to find alternatives to fossil fuels. Biofuels had become particularly attractive to the EU as the bloc races to reduce its reliance on Russian oil and gas.

The EU, already in the midst of an energy crisis – and dependent on Russia for 40% of its gas and 27% of oil imports – produces 34% of the world’s biodiesel from vegetable oils, according to data from the Organisation for Economic Co-operation and Development - Food and Agriculture Organization (OECD-FAO).

**Sky-high fertiliser prices have farmers worldwide reducing planned harvests** and the amount of land they're planting.

The fertiliser crisis is in some respects more worrying because it [could inhibit food production in the rest of the world](https://www.reuters.com/business/sanctions-bite-russia-fertilizer-shortage-imperils-world-food-supply-2022-03-23/) that could help take up the slack from stalled Ukrainian and Russian grain deliveries, according to Maximo Torero, chief economist for the U.N. Food and Agriculture Organization.

"If we don't resolve the problem of fertiliser, and trade of fertilisers doesn't continue, then we'll have a very serious problem of [food] supply next year," Torero told Reuters.

Western sanctions on Russia, a major exporter of potash, ammonia, urea and other soil nutrients, have disrupted shipments of those natural resources around the globe. China last year imposed fertiliser export curbs to protect its own farmers as global prices soared due to strong demand and high energy prices.

Russia and China exported 28% of the world’s fertilisers in terms of trade value from 2016 to 2020 according to a Reuters analysis of UN Comtrade data.

The strain can be seen in agricultural powerhouse Brazil, where some farmers are applying less fertiliser to their corn, and some federal legislators are pushing to open protected indigenous lands for the mining of potash.

In Zimbabwe and Kenya, small farmers are reverting to using manure to nourish their crops.

**Ukrainian crisis disrupt global markets**

**Strubenhoff 22**, Heinz Strubenhoff was a senior operations officer at the International Finance Corporation, 6/14/22, “The war in Ukraine triggered a global food shortage,” Brookings, https://www.brookings.edu/blog/future-development/2022/06/14/the-war-in-ukraine-triggered-a-global-food-shortage/

**Russian ships and sea mines block Ukrainian Black Sea port**s. Before the war, Ukraine exported on average about 6 million tons of agri-commodities monthly to countries in the Middle East, Asia, and Africa. Currently, only about 15 to 20 percent of this volume can be exported via rail, Danube river, and trucks (about 700,000 tons in April 2022 and about [1 million tons in May 2022](https://www.npr.org/2022/05/31/1102277441/how-to-get-20-million-tons-of-grain-out-of-ukraine?fbclid=IwAR2XgmISKAwMaDFCfVw9XU2_rKNIdsoxXwJ-s5cCyrVgkCrP6hJOUyT3pIo&t=1654513337407&t=1654699533940)). Also, trade risks related to Russian exports have been increasing due to sanctions by various trade partners and banks. This led to price spikes and supply chain disruptions significantly undermining food security in poor importing countries.

[**Global trade**](https://www.igc.int/en/default.aspx)**of cereals except rice is a little less than 20 percent of total world production** (about 620 million of about 3.3 billion tons produced in 2020/2021). Total production is sufficient to feed all 8 billion inhabitants of the world, but production in semiarid countries is less and some countries are behind their potential. That’s why trade plays an important role to balance global supply and demand. In the [2020/21 season](https://www.usda.gov/oce/commodity/wasde), Russia provided 52.32 million tons (7.8 percent) and Ukraine 69.82 million tons (11.3 percent) of cereals to the world.

**Ukraine also exports oilseeds** (sunflower, soybeans, rapeseed) with a well-established crushing industry to produce sunflower oil. [Fifty-two percent](https://stats.oecd.org/index.aspx?queryid=76856) of globally traded sunflower seed and oil came from Ukraine in 2020. Currently, edible-oil supply chains are disrupted and edible-oil prices increased even higher than cereals prices. In the last weeks, the author couldn’t buy any sunflower oil in his neighborhood in Hamburg/Germany.

**Global cereal and oilseed markets were tight even before the crisis due to shrinking stocks leading to upward price trends**. This new supply shock led to prices almost doubling compared with two years ago. Agri-commodity market demand is inelastic—people have to eat—and this leads to dire consequences in poor importing countries. The number of people whose food supply is insecure (about 800 million) and people facing [hunger](https://www.globalhungerindex.org/) (about 44 million) will most likely grow. This will result in increased poverty and threaten social stability in poor importing countries.

[Global stocks](https://www.usda.gov/oce/commodity/wasde) are shrinking. Global wheat stocks of about 300 million tons are sufficient to cover about four months of annual global consumption. Of these stocks, about 50 percent (about 150 million tons) are held in China. We know from the past that prices go up if stocks reach a certain critical low level. In this situation, crisis-induced trade disruptions accelerate market developments and may even lead to government interventions limiting exports to protect national interests. If many countries do this, it has disastrous effects on world markets.

**Ukrainian current cereal**[**stocks**](https://ucab.ua/ua)**are estimated at about 20 to 25 million tons**. The new harvest in the fall will be much lower than last year due to less acreage and lower intensity caused by lack of necessary inputs and finance. Estimates are difficult, but [market observers](https://ucab.ua/ua) say it would be about 20 to 30 percent less or about 30 million tons. Assuming constant domestic demand, this would lead to about 40 to 50 percent lower exports in 2022. So, if the Black Sea ports remain blocked till the end of this year, the world will have about 55 million tons less of cereals. To put this into perspective, consider that 1 ton of cereals may feed a family of six for a full year. So, this missing number of cereals would mean we would have less food for more than 300 million people.

And it can get even worse if we consider constrained exports of [fertilizer](https://www.fertilizer.org/). The share of Russia and Belarus in global potash trade is 40 percent. Russia alone exports about 20 percent of nitrogen and 10 percent of phosphate. Fertilizer prices are increasing. As a consequence of higher cereal and oilseed prices, production in poor importing countries can be expected to increase but this will partly be offset by higher input prices. Poor importing countries in Africa may try to incentivize higher production to feed a growing population, but they would need tremendous efforts of finance, and investments to reach this goal. Even with more resources channeled to agriculture in Africa, supply would react with a time lag.

**Mines uniquely halt trade of grains**

Holly **Ellyatt 22**, Holly Ellyatt writes for CNBC.com focusing on European macro-economics and politics, has led digital coverage of the European financial crisis, U.K. politics and Brexit, and Russia, studied European Social and Political Studies at University College London (UCL) and then completed a MA in Broadcast Journalism at City University, 6/10/22, “Russia and Ukraine are battling over underwater mines as the global food crisis worsens,” <https://www.cnbc.com/2022/06/10/russia-and-ukraine-battle-over-underwater-mines-in-the-black-sea.html>, JH

The **world is facing a global food crisis as a result of the war in Ukraine**, with soaring prices being felt around the world as a result of Russia’s invasion — and **naval mines are a big part of the problem**.

Russia and Ukraine are trading increasingly frequent barbs over the mines in the Black Sea, which are being used by Russia to its political advantage as its blockade of Ukraine’s ports continues.

“**The biggest impediment to the grain exports is clearly the Russian blockade**s, and that includes the mines,” Maximilian Hess, central Asia fellow at the Foreign Policy Research Institute, told CNBC Thursday.

“The real issue going forward is that Russia seems intent on using this as an instrument of leverage.”

Russia and Ukraine accuse each other of using the mines to disrupt shipping and prevent grain exports from being able to leave the country, a factor that has contributed to global food prices rising.

Ukraine has even accused Russia of setting Soviet-era naval mines adrift [in order to purposefully disrupt shipping](https://www.reuters.com/world/europe/russia-trades-accusations-with-ukraine-drifting-black-sea-mines-2022-03-31/) and global food supplies, saying that such mines were effectively “uncontrolled drifting ammunition.”

[Russia denies this and has, in turn, blamed Ukraine](https://tass.com/defense/1430661?utm_source=google.com&amp;utm_medium=organic&amp;utm_campaign=google.com&amp;utm_referrer=google.com) for the un-moored mines. Moscow has also blamed the international sanctions imposed on the country for the global food crisis, and said that exports can restart as soon as Ukraine removes the mines from its ports.

Ukraine has refused to do that, saying it will allow Russia to attack more of its coastline. Odesa, its last main functioning port (and a mined one at that) further westward along the Black Sea coast, is particularly vulnerable.

William Alberque, director of strategy, technology and arms control at the International Institute for Strategic Studies, told CNBC that Ukraine would have been “crazy” not to have mined the approaches to its ports and that its reluctance to remove them now was rational.

“You can completely understand why Ukraine would be using sea mines right now. The chance of amphibious assault on Odesa has been something explicitly made by the Russians,” he said Thursday.

But strategists agree that Russia is now using the mines to its economic and military advantage.

“**The mines are a real barrier to grain exports from Ukraine** ... and they’re a big problem,” Sidharth Kaushal, a naval power expert with the Royal United Services Institute think tank, told CNBC Thursday, noting that Russia had been strategic about the mines.

“It is certainly an excuse for the Russians that they’re there because they can selectively de-mine ports they control, try to reroute trade, and maintain a de facto blockade over Odesa whilst claiming that this is all on the Ukrainians.”

Ukraine does not deny mining its own ports in order to protect them from an amphibious attack by Russia, given that one of its key war objectives is to gain control of Ukraine’s ports along the Black Sea coast. These include Odesa and those along the Sea of Azov, like Mariupol, which Russia seized after a dogged, aggressive siege.

**Adv---China Ups**

**Offensive mining deters China**

Commander Victor **Duenow 22**, Naval Academy graduate, is a career MH-60S naval aviator who completed tours at Helicopter Sea Combat Squadron (HSC) 22, Helicopter Training Squadron 8, the USS Theodore Roosevelt (CVN-71), and U.S. Fleet Forces Command, June 2022, “Disputing Chinese Sea Control Through Offensive Sea Mining,” *U.S. Naval Institute*, <https://www.usni.org/magazines/proceedings/2022/june/disputing-chinese-sea-control-through-offensive-sea-mining>, JH

If the People’s Liberation Army Navy (PLAN) had free use of its naval facilities during a conflict with the United States, China would be better able to attain and sustain sea control. **Mining Chinese waters would exploit China’s relative weakness in mine countermeasures**, challenge and **deter PLAN activity**, and disrupt logistics support for PLAN offensive operations.

China has not invested heavily in mine countermeasures partly **because the United States does not maintain a significant mine inventory**. The PLAN is aware of U.S. mine warfare capabilities and has acknowledged mining must be taken into account during a maritime conflict.12 China Central Television Channel 7 coverage of PLAN mine countermeasures exercises showed that China considers mines a serious threat.13 Although the PLAN maintains mine countermeasures platforms, its equipment is largely outdated except for a small number of newer vessels and unproven experimental unmanned underwater vehicles.14 **PLAN mine countermeasure capabilities are “limited”** and primarily focused on mine countermeasures in the nearshore and port environments.15 Mines are easy to lay, but even for sophisticated mine countermeasures equipment removal is a time-consuming and challenging evolution.16 Chinese weakness in mine countermeasures leaves them vulnerable to mining from the United States.

Offensive mining would hold at risk and blockade in port the PLAN’S ships and submarines. Although the PLAN could direct its vessels to challenge the minefields, that would cost valuable time, ships, and people.17 Improvements in PLAN ships and antiship cruise missile technology are essential to helping the Chinese maintain sea control.18 By offensively mining the Pearl River Delta and Yellow Sea, the United States could reduce the area in which China could threaten U. S. and allied forces, providing more room to safely maneuver.

**Taiwan is innovating its air defense now; that leaves naval mining as its weak spot**

Peter **Suciu 22**, Peter Suciu is a defense writer and journalist for the National Interest, 2/16/22, “Taiwan Invests in Air Defense Systems to Counter China,” *The National Interest*, <https://nationalinterest.org/blog/buzz/taiwan-invests-air-defense-systems-counter-china-200630>, JH

[**Taiwan**](https://nationalinterest.org/feature/america-cant-dump-taiwan-17040)**is seeking to enhance its air defenses** as the People's Republic of China [continues](https://nationalinterest.org/feature/five-chinese-weapons-war-taiwan-should-fear-11045) to sortie combat aircraft into the self-governing island's air defense identification zone (ADIZ).

According to the recent "Global Missiles and Missile Defense Systems Market 2021-2031" report from international data analytics firm GlobalData, **Taiwan is expected to spend approximately $6.1 billion on missiles** and missile defense systems between 2021 and 2031.

In addition to the TK-3, **Taiwan's acquisition of short-range air defense systems, including the U.S. Stinger FIM-92H** and the indigenously developed Sea Oryx naval system, **is also expected to boost the country's air defense network**. Taiwan is further enhancing its strike capability by acquiring other advanced missiles.

"As the Patriot constitutes a key component of Taiwan's air defense network, its up-gradation and maintenance are of utmost importance," [explained](https://www.globaldata.com/taiwan-spend-6-1bn-modernizing-air-defense-striking-capabilities-observes-globaldata/) an analyst at GlobalData.

**The need for Taiwan to modernize its air defense infrastructure has been primarily fuelled by China’s**[**frequent**](https://nationalinterest.org/feature/what%E2%80%99s-behind-china%E2%80%99s-growing-military-activity-around-taiwan-162221)**incursions** into its ADIZ. In January, [China sent](https://nationalinterest.org/blog/buzz/dozens-chinese-planes-violate-taiwans-air-defense-zone-199960) thirty-nine warplanes into Taiwan’s ADIZ in its second-largest incursion on record.

**Adv---Semiconductors**

For semiconductors scenario

**Ukraine’s Neon Gas is key to global semiconductors; no alt causes**

Per K. **Hong et all 22**, [Per K. Hong](https://www.linkedin.com/in/perkristianhong/) ([@per\_hong](https://twitter.com/Per_Hong)) is a long-time Kearney partner and a core member of the firm’s strategic operations practice. [Erik Peterson](https://www.linkedin.com/in/erikpeterson14/) is a Kearney partner and managing director of the firm’s Global Business Policy Council. [Bharat Kapoor](https://www.linkedin.com/in/kapoorbharat/) ([@bharatkapoorchi](https://twitter.com/BharatKapoorCHI)) is a partner and global lead at Kearney. [Drew DeLong](https://www.linkedin.com/in/drewtdelong/) ([@drewtdelong](https://twitter.com/drewtdelong)) is a consultant at Kearney, 5/10/22, “The Crisis in Ukraine Spells More Trouble for Semiconductor Supply,” MIT Sloan, <https://sloanreview.mit.edu/article/russias-invasion-spells-more-trouble-for-semiconductor-supply/>, JH

**The crisis in Ukraine is the next tectonic disruption** in an exhausting two-year span for the semiconductor industry — which was already significantly challenged by the COVID-19 pandemic and [insufficient capacity to meet surging demand](https://www.bloomberg.com/graphics/2021-chip-production-why-hard-to-make-semiconductors/)**. This latest threat to semiconductor production may be the most significant yet**: It is poised to send shockwaves rippling through a range of manufacturing sectors, including high tech, automotive, consumer electronics, and household appliances.

The root of the issue is that **Ukraine is a prime supplier of neon gas** — which is required to operate the lasers used in the lithography phase, the heart of semiconductor fabrication. Without neon, chip production comes to an abrupt halt. The U.S. has historically sourced as much as **90% of the required semiconductor neon from Ukraine, which has also provided about 70% of the global supply**. Ukraine is also a major supplier of xenon and krypton gases, also critical to chip manufacturing.

The concentration of these strategically essential gases in Ukraine is an accident of manufacturing history. Neon gas is a byproduct of steel production, specifically from older steel mills that today are largely located in eastern Ukraine. The former Soviet Union (which included today’s Ukraine) had many of these large steel mills, which were outfitted with air separation equipment to capture rare waste gases, including neon, krypton, and xenon, for use in experimental high-powered laser weapons, missiles, and satellites. After the dissolution of the USSR in 1991, these older steel facilities were largely replaced with new infrastructure that had no gas-collection technology because the economics did not support it. In contrast, by continuing to operate old-style steel mills, **Ukraine became the dominant supplier of these gases that are vital to the global semiconductor industry.**

**Adv---Iran UPs**

**Iran tensions are at an all time high, threatening to close the Gulf; economic and nuclear tensions key to lash out**

Struan **Stevenson 22**, Struan Stevenson is the coordinator of the Campaign for Iran Change was a member of the European Parliament representing Scotland (1999-2014), president of the Parliament's Delegation for Relations with Iraq (2009-14) and chairman of the Friends of a Free Iran Intergroup (2004-14); he is an international lecturer on the Middle East and president of the European Iraqi Freedom Association, 6/27/22, “Gunboat diplomacy: Iran ramps up aggression in Strait of Hormuz,” *UPI*, <https://www.upi.com/Voices/2022/06/27/iran-Iran-gunboat-diplomacy-strait-hormuz/4031656331659/>, JH

Gunboat diplomacy was a tactic famously utilized by some of the imperialist powers during the 19th century. It is a somewhat outdated concept, although that doesn't seem to have deterred the Iranian regime. Last week, ships from the **U.S. Fifth Fleet were sailing through international waters in the Strait of Hormuz when they were threatened** by high-speed, head-on assaults by three naval vessels from Iran's Islamic Revolutionary Guards Corps.

The U.S. coastal patrol ship USS Sirocco had to fire a warning flare when the IRGC vessels, acting in a hostile manner, came within 50 yards of their ship. The threatening and dangerous behavior lasted for more than an hour before the IRGC boats departed.

The Strait of Hormuz lies between the Persian Gulf and the Gulf of Oman, providing the only sea passage to the Indian Ocean for crude oil from many of the world's largest producers. An average of **21 million barrels a day flows through the strait, which is over 20% of global consumption**. Around one-third of the world's sea-borne petroleum and nearly all the liquefied gas from Qatar, the leading global gas exporter, passes through this constricted chokepoint only 21 miles wide at its narrowest point.

**With the current global energy crisis caused by Russia's illegal invasion of Ukraine, the route has become even more strategically critical**. As the theocratic regime faces crisis upon crisis at home and abroad, supreme leader Ayatollah Ali Khamenei and President Ebrahim Raisi, known as the "Butcher of Tehran," have ramped up their aggressive activities in the strait to frighten those they regard as the regime's enemies, even threatening to close the strait altogether.

The most recent naval encounter is not the first. In June 2019, **limpet mines were left behind by IRGC commandos** following attacks on two oil tankers in the Gulf of Oman. The oil tanker Kokuka Courageous was rocked by several explosions that caused extensive damage. An IRGC patrol boat was then filmed moving alongside the tanker as commandos removed an unexploded limpet mine from the hull of the vessel. Following the attack, the Kokuka Courageous, along with the Norwegian-owned Front Altair, were towed to the Emirati coast by U.S. naval authorities.

In July 2019, **Iran seized the British-flagged Stena Impero on the Strait of Hormuz**. It was held in the Iranian port of Bandar Abbas for two months and only released following international pressure. In January 2021, the IRGC seized a South Korean-flagged tanker in Gulf waters, claiming it had detained the Hankuk Chemi tanker and its crew for allegedly dumping toxic chemicals in the Gulf, a blatantly false accusation. In the same week, explosives experts had to defuse an Iranian limpet mine attached to a Liberian-flagged oil tanker in waters off the Iraqi port of Basra. Sailors on board the MT Pola said they had discovered a limpet mine of the type commonly deployed by naval divers. It had been attached to the side of the tanker and could have caused devastating damage had it exploded, particularly as the MT Pola was refueling another tanker at the time with a ship-to-ship transfer to the MT Nordic Freedom, a Bermuda-flagged tanker.

In May 2021, an IRGC speedboat armed with heavy machine guns, approached within 150 yards of U.S. warships at high speed, as the Americans traveled through the Strait of Hormuz. Warning shots had to be fired at the IRGC vessel before it finally withdrew. Then in August 2021, a tanker was hijacked by IRGC commandos and ordered to "sail to Iran" -- days after an IRGC drone attack killed a British security guard working with special forces and a Romanian soldier on the MV Mercer Street. A nine-strong armed group climbed on board the Asphalt Princess off the coast of the Gulf of Oman close to the Strait of Hormuz, seizing the vessel at gunpoint. Iran, as usual, denied involvement in the suspected drone attack and the hijacking.

**The mullahs clearly believe that their aggressive conduct will lead to U.S. capitulation over the stalled nuclear talks**. They will surely have to think again. Negotiations to reinstate the tattered Joint Comprehensive Plan of Action nuclear deal, signed by U.S. President Barack Obama in 2015 and torn up by President Donald Trump in 2018, have run aground due to the mullahs' farcical demands. Iran is insisting on the lifting of all sanctions and the delisting of the IRGC as an international terrorist organization.

Using the **IRGC to threaten shipping in the Strait of Hormuz** is hardly likely to encourage American sympathy. Indeed, the United States knows that the IRGC and its extra-territorial Quds Force is behind all Iran's proxy wars in Syria, Yemen, Iraq, Lebanon and Gaza and is known to sponsor international terror worldwide. **The regime's foreign wars and acts of terror are a calculated strategy to distract their enraged and starving population** from another nationwide uprising that could sweep the mullahs from power.

The foolish attempt at gunboat diplomacy has taken place during a disastrous year for the ruling dictatorship in Iran. **The economy has collapsed, unemployment is pervasive**, inflation is out of control, the Iranian currency is in freefall and over 75% of the 80 million population are struggling to survive on incomes below the international poverty line. There are daily protests in towns and cities throughout Iran.

**If Iran blocks the straight, it’ll be nuclear war---But there’s a small window of opportunity if we can clear the mines to de-escalate**

James Jay **Carafano 12**, James Jay Carafano, a leading expert in national security and foreign policy challenges, is the vice president of Heritage's Kathryn and Shelby Cullom Davis Institute for National Security and Foreign Policy and the E. W. Richardson Fellow, 1/12/12, “If Iran Blocks Strait, U.S. Must Use Force,” *The Heritage Foundation*, <https://www.heritage.org/middle-east/commentary/if-iran-blocks-strait-us-must-use-force>, JH

"Bombs away" should not be the first military response from the United States, but respond we must. **Closing international waters is a blockade – essentially an act of war against other states**.

Were we to stand idly by and let any nation shut down a vital international passage, **it would lend credence to the view that the United States is now too weakened and timid to defend its sovereign rights**. To ignore such aggression would be like giving the Barbary Pirates a pass when they ravaged U.S. shipping in the early 1800s.

And, don't buy the line that it's none of our business. Over a third of the world's oil transported by sea goes through the strait. If that flow stops, you can bet the farm it will cause huge problem here at home.

When the Heritage Foundation war-gamed this scenario back in 2007, **the impact was immediate: a near doubling in the cost of a barrel of oil and a loss of 1 million domestic jobs**.

Though closing the straits is an act of war, responses in war ought to be proportional. Thus, **the first U.S. military objective ought to be to reopen the straits**, and you don't have to attack Iran to do that.

Consider 1987, when Iran tried to interfere with the passage of oil through the strait. President Ronald Reagan authorized Operation Ernest Will. The U.S. Navy protected ships going through the straits and only conducted military operations in defense of the tankers or U.S. forces.

That should be the going-in strategy today. If Iranian attacks were to persist, then a proportional and responsible act would be to take out the bases or support infrastructure where the attacks originate.

**And if the Iranians still didn't get the message, the target set should then be expanded to things that the regime values: targets like the Iranian Revolutionary Guard Headquarters, government facilities, and other military facilities** – including those contributing to Tehran's nuclear weapon and ballistic missile program.

Going after these targets might require taking out Iranian command and control and air defense sites. That would be justified.

**At no point along the way would the United States need to ask the United Nations or anyone else for permission**. The United States would just be exercising its inherent right as a nation to act in self-defense.

**Simply threatening triggers the link**

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

By threatening to close the vital waterway linking the oil-rich Persian Gulf with the world, through which approximately a third of the world’s petroleum is ferried, Iran stokes fears of war and economic crisis. This not only raises gas prices in anticipation of supply disruptions, but it also influences world opinion towards the direction of de-escalation, which would pressure the United States to back away from its own red lines. Given the number of countries that rely on Middle Eastern oil, including that of Iran, Tehran can craft a damning narrative that shows that the United States is generating a crisis to the world’s detriment.

**Iran tensions are escalating now**

Shahira **Amin 7-13**, Shahira Amin is an independent journalist based in Cairo, former contributor to CNN’s Inside Africa, Amin has been covering the development in post-revolution Egypt for several outlets including Index on Censorship and Al-Monitor, 7/13/22, “Biden’s Middle East trip is sending Iran an escalatory message. Here’s why,” *Atlantic Council*, https://www.atlanticcouncil.org/blogs/menasource/bidens-middle-east-trip-is-sending-iran-an-escalatory-message-heres-why/

**US President Joe Biden’s first Middle East**[**trip**](https://foreignpolicy.com/2022/07/07/biden-middle-east-trip-israel-saudi-arabia-mbs-oil-prices/)**since taking office comes amid escalating**[**threats**](https://english.aawsat.com/home/article/3327671/israel-escalates-military-threats-against-iran) of an Israeli military attack against Iran. The visit takes place after talks to revive the Iran nuclear deal ended in Qatar on June 29 without any [progress](https://edition.cnn.com/2022/06/29/politics/iran-nuclear-deal-talks-end-no-progress/index.html).

“**We will not hesitate to use force to keep our citizens safe**,” Israeli Prime Minister Yair Lapid said at an Israeli Defense Forces graduation ceremony on July 8. He cited a nuclear Iran, Hezbollah’s precision-guided missiles in Lebanon, and an axis of terror that is trying to entrench itself in Syria as posing [challenging threats](https://www.timesofisrael.com/lapid-tells-graduating-idf-officers-that-israels-mission-is-to-restore-trust/) to Israel’s security.

A former Israeli national security advisor had warned earlier that Israel must prevent Iran from building bases in Syria at any [cost](https://www.haaretz.com/middle-east-news/2017-07-20/ty-article/israel-escalates-threats-against-iran/0000017f-f98e-d880-a7ff-ff8eb9520000). Israel has regularly carried out [airstrikes](https://syriaaccountability.org/the-legality-of-israeli-airstrikes-in-syria/) against Iranian-backed forces in Syria—including the [bombing](https://www.washingtonpost.com/world/2022/06/14/syria-damascus-airport-bombed/) of Damascus airport in early June forcing its closure for several weeks—in a bid to stop weapons shipments to [Hezbollah](https://www.mei.edu/publications/hezbollahs-regional-activities-support-irans-proxy-networks), which has close links with Iran. Israel reportedly [coordinated](https://www.wsj.com/articles/u-s-secretly-reviews-israels-plans-for-strikes-against-iranian-targets-in-syria-11655405162) these and earlier airstrikes closely with Washington, according to a report published in the Wall Street Journal.

In early June, **Israel conducted military**[**drills**](https://www.france24.com/en/live-news/20220602-israel-holds-military-drills-amid-iran-tensions-1)**in the Mediterranean** and Red Sea that were clearly meant to send a message that it isn’t ruling out the military option to stop Iran from obtaining a nuclear bomb.

**Meanwhile, US patience with Iran is wearing thin;** it appears that Biden’s visit to Israel on July 13 and his subsequent meeting with the Gulf Cooperation Council (GCC) and Arab leaders in Saudi Arabia on July 15-16 may likely be a prelude to an escalation against Iran.

GCC member states—Saudi Arabia, Bahrain, Kuwait, Qatar, Oman, and the United Arab Emirate (UAE)—share Israel’s concerns about **Iran’s “**[**sponsorship of terrorism**](https://www.al-monitor.com/originals/2022/06/tehran-denounces-gcc-over-missile-comments)**” and its expansionist goals**, which they perceive as threats to their security. Several of these Gulf states have sizable Shia minorities and accuse Iran—which is predominantly Shia—of fomenting [sectarian](https://studies.aljazeera.net/ar/node/1071) tensions in their countries—accusations that aren’t entirely baseless.

The flurry of diplomatic activity in the region ahead of Biden’s Middle East trip, is part of efforts by the GCC and **Arab leaders to coordinate**[**stances**](https://www.al-monitor.com/originals/2022/06/egypts-sisi-arab-leaders-coordinate-positions-ahead-biden-visit)**and forge a unified force against Iran**. This included a regional tour by Saudi Crown Prince Mohamed bin Salman (MBS) in late June that took him to Egypt, Jordan, and Turkey;  visits by Egyptian President Abdel Fattah el Sisi to Oman and Bahrain on June 27-30 and a recent, little-publicized [meeting](https://www.timesofisrael.com/egypt-hosted-secret-meetings-between-israeli-saudi-arabian-officials-report/) between Saudi and Israeli officials in Egypt.

Sisi, who has been invited to participate in the upcoming Saudi summit in the port city of Jeddah with Biden, has reaffirmed Egypt’s commitment to Gulf security calling it an [extension](https://egyptindependent.com/egypts-sisi-security-of-gulf-countries-is-extension-to-egyptian-national-security/) of Egypt’s national security. He has also expressed his “[rejection](https://castle-journal.com/index.php/politics/2747-sisi-stresses-egypt-s-consistent-attitude-towards-gulf-security-and-rejects-any-practices-that-seek-to-destabilize-and-stabilize-it) of any practices that seek to destabilize the Gulf region.” Sisi’s remarks came during the June 21 visit by MBS to Egypt.

**There has been talk of a push by the Biden administration for a regional security**[**alliance**](https://news.yahoo.com/biden-trip-promotes-budding-arab-155217699.html)**along the lines of NATO** which would include Arab states, Israel and the Gulf to counter the Iranian threat. Israeli Defense Minister Benny Gantz has [reportedly](https://www.timesofisrael.com/gantz-israel-is-building-a-middle-east-air-defense-alliance-against-iran/) hinted at creating a US-led Middle East Air Defense Alliance (MEAD) that would defend member states from hostile missiles and drones. The idea appears to be gaining ground in light of Iran’s intransigence in the Doha talks.

With tensions running high in the region, an escalation against Iran at this time can only exacerbate the situation, further widening the [rift](https://www.reuters.com/article/us-saudi-iran-gulf-states-idUSKCN0UP1TL20160111) between Iran and its adversaries in the region. Perhaps sensing the danger of a looming war, Iran appears to have backtracked on its earlier demand for the easing of US sanctions in return for nuclear concessions: it now insists that a revived nuclear deal with the US  is [possible](https://www.france24.com/en/live-news/20220630-iran-says-nuclear-deal-still-possible-despite-qatar-talks-setback).

“We are determined to continue negotiating until a realistic agreement is reached,” Iranian Foreign Minister Hossein Amir-Abdollahian said on July 4 after the Doha talks stalled.

**Resorting to military means when there is even the slimmest chance for diplomacy** would be a serious blunder and can only plunge the already-troubled region into further conflict. A military campaign against Iran would have grave implications for all involved. The US shouldn’t repeat the past mistake of its 2003 [invasion](https://origins.osu.edu/milestones/march-2013-us-invasion-iraq-10-years-later?language_content_entity=en) of Iraq which came after a nod of approval from some of its Middle Eastern allies. Not only did the Iraq war [cost](https://www.militarytimes.com/opinion/commentary/2020/02/06/the-iraq-war-has-cost-the-us-nearly-2-trillion/) the US nearly $2 trillion, it also [killed](https://www.reuters.com/article/iraq-war-anniversary-idUSL1N0C65YD20130314) at least 134,000 Iraqi civilians. Meanwhile, over 4,200 US military personnel [lost](https://pubmed.ncbi.nlm.nih.gov/20446496/) their lives in the first 6.5 years of Operation Iraq Freedom and left Iraq marred by terror and conflict.

An all-out military campaign against Iran isn’t the solution as it is unlikely to dissuade Iran from pursuing its nuclear ambitions; if anything, **it would escalate tensions further and plunge the already-troubled region into deeper conflict**. War or no war, the Islamic Republic will likely continue to be a security challenge to the interests of the US and its regional allies.

Covert military actions are already taking place, according to media reports. Since May, at least seven Iranian officials and scientists have been killed in what are likely targeted [assassinations](https://foreignpolicy.com/2022/07/01/iran-israel-assassinations-covert-warfare-irgc/) by Israel meant to weaken Iran’s nuclear program. Iran has downplayed the assassinations, accusing Israel of only one of the killings—the May 22 slaying of Colonel Sayyad Khodai, a senior official with the Islamic Revolutionary Guard Corps. Nearly all the Iranians killed in recent months were either linked to Iran’s nuclear facilities or military infrastructure supporting Iran’s proxies.

Attempts by Iran to retaliate for Khodai’s killing have failed—so far. According to now-former Israeli Prime Minister Naftali Bennett, Israel and Turkey have thwarted several attempts by Iran-backed terrorists to attack Israeli tourists visiting Turkey. The suspects were [arrested](https://english.alarabiya.net/News/middle-east/2022/06/20/Israel-PM-says-thwarted-Iranian-attacks-in-Turkey-suspects-arrested), but Israel has warned its citizens against visiting Turkey for fear of retaliatory attacks by Iran.

As a result of Israel’s covert military actions in Iran, it has compromised the safety and security of its citizens abroad. In war, there are no guarantees for safety and innocent citizens often pay the price.

**Iran escalating with mines now; they’ve threatened before and the US can’t solve**

Maya **Carlin 22**, Maya Carlin is an analyst with the Center for Security Policy and a former Anna Sobol Levy Fellow at IDC Herzliya in Israel; She has by-lines in many publications, including The National Interest, Jerusalem Post, and Times of Israel, 7/11/22, “How Iran Uses The Threat Of Naval Mines,” 1945, https://www.19fortyfive.com/2022/07/naval-mines-iran-nuclear-concessions/

**Mines Are a Consistent Threat to U.S. Naval Power**

For centuries, mines have been utilized by navies to defend and project power. While defensive mines can deter invading forces from moving into certain waters, offensive mines can cause psychological impacts. Mines are difficult to locate without professional equipment, making their dispersal in bodies of water very risky. Since 1907, international law has instructed governments to publicly disclose mined areas. However, by World War II, many navies acquired the [capability](https://www.propublica.org/article/iran-has-hundreds-of-naval-mines-us-navy-minesweepers-find-old-dishwashers-car-parts) to drop mines by aircraft over enemy harbors. Prior to the innovation of more advanced mines, the contact variant represented the only mine in use. In order for a contact mine to detonate, it has to be physically touched by a target. As new mine variants and new military capabilities emerged in the first half of the last century, **this weapon became one of the U.S. Navy’s worst nightmares**.

Throughout the eight-year-long Iran-Iraq War in the 1980s, the Islamic Republic of [Iran](https://www.19fortyfive.com/2022/07/the-west-must-isolate-iran/) mined several areas of the Persian Gulf and nearby waters. Its navy primarily used variants of the 1908 Russian-designed contact mine, which was ultimately responsible for the sinking of the [USS Samuel B. Roberts](https://news.usni.org/2015/05/22/the-day-frigate-samuel-b-roberts-was-mined) (FFG058) in 1988. According to the [U.S. Naval Institute](https://news.usni.org/2012/07/17/iranian-mines-strait-hormuz-not-showstoppers), **Iraq also indiscriminately deployed over 1,000 mines in the northern Gulf during this period of conflict**:

“In the early morning of 18 February 1991, the USS Tripoli (LPH-10), which had embarked airborne mine-countermeasure helicopters, struck an Iraqi contact mine; four hours later, the Aegis cruiser Princeton (CG-59) fell victim to a Manta mine, a ‘mission-kill’ that took the cruiser out of the war and cost about $100 million to bring her back on line. More to the point of the impact of a possible Iranian mining campaign in 2012, it took the Multinational Coalition forces more than two years of intensive mine-countermeasure operations to declare the northern Gulf mine free.”

**The U.S. Navy’s history with naval mines makes clear how they threaten its warships**. Perhaps, for this reason, **Iran has used the threat of mines to extract concessions from the West**. Amid growing tensions between the U.S. and Iran in 2012, **Tehran**[**threatened**](https://news.usni.org/2012/07/17/iranian-mines-strait-hormuz-not-showstoppers)**to mine the Strait of Hormuz**. According to Iran’s then-top naval commander Adm. Habibollah Sayyari, forcing the closure of the strait would be “easier than drinking a glass of water.” **The Strait is a strategic waterway; nearly a third of the world’s oil needs to pass through it.** The international community’s dependence on the functioning of the Strait makes Iran’s threats serious.

Holding the Gulf, and the World, Hostage

Over the last decade, Iran has become more aggressive in the Persian Gulf.

In 2020, **Iran’s navy was accused of carrying out an attack** targeting [four commercial](https://apnews.com/article/strait-of-hormuz-ap-top-news-persian-gulf-tensions-gulf-of-oman-tehran-5484dc4a51644fa9839546e1cd7bf89f) ships owned by Saudi Arabia and the United Arab Emirates off the port of Fujairah. The following year, an Israeli-managed tanker was targeted in an attack off the coast of Oman. Iran was likely the culprit, according to U.S. military officials. Earlier this week, Israeli Defense Minister Benny Gantz [showed](https://www.al-monitor.com/originals/2022/07/iran-navy-expanding-its-presence-red-sea-israel-says) photographs of Iranian vessels in the Red Sea, referring to their presence as a threat. Last month, several Middle Eastern news outlets reported that Iranian-backed Houthi rebels have placed sea mines in the Red Sea. According to [Breaking Defense](https://breakingdefense.com/2021/06/houthis-lay-sea-mines-in-red-sea-coalition-boasts-few-minesweepers/), the mines were positioned in the southern part of the waters, where U.S. Navy and other allied ships sail through. Yemen’s [Deputy Minister](https://almashareq.com/en_GB/articles/cnmi_am/features/2022/06/10/feature-03) of Legal Affairs and Human Rights said that “the sea mines used by the Houthis came with the support and training of the Islamic Revolutionary Guard Corps.” Additionally, “According to a January report by the UN Panel of Experts on Yemen, the [**Houthis**](https://www.19fortyfive.com/2021/02/kurds-are-more-deserving-of-terror-delisting-than-houthis/)**continue to plant sea mines in the Red Sea**, off islands north of the three ports that they occupy.”

U.S.-Iranian nuclear negotiations in Vienna are expected to restart in the coming weeks. **Tehran could be using its mine use as leverage during the talks**. Iran’s leadership wants the U.S. and the rest of the West to recognize its ability to disrupt the global supply of oil, a significant threat to the world economy. Since Iran’s naval capabilities are generally lackluster, the regime depends on mines and their potentially destructive impacts to exert power over the Persian waters.

**Adv---NATO key**

**US investment is key to fulfill NATO framework**

Andrea **Daolio 19**, Andrea Daolio, from Italy, has an engineering background and a longstanding passion for wargaming and for geopolitical, historical, and military topic, 10/21/19, “Meeting the Mine Warfare Challenge with Unmanned Systems,” CIMSEC, https://cimsec.org/meeting-the-mine-warfare-challenge-with-unmanned-systems/

Mines can be put in place by aircraft, surface ships, pleasure boats, submarines, and combat divers and even from pickup trucks crossing bridges. They can be found from the surf zone to deep water (greater than 200 feet) and can be of many different and increasingly capable types. These range from simple contact mines to more complex magnetic, acoustic or pressure mines; from advanced mines that are a combination of the preceding types to computerized mines that can be even set to be detonated only by some specific ship type.

Mines are increasingly difficult to detect. The underwater environment is already a difficult medium to search through, as the currents, differences in salinity and temperature, and seafloor clutter (which is often littered with a vast array of debris) impede search. Meanwhile, mines are becoming even more elusive as stealthy mines made of fiberglass can be extremely difficult to detect. Furthermore, modern sonars are hardly capable enough to find advanced types of mines buried under the seafloor.

**Machine learning and algorithms can also improve the ability of a UUV to recognize mines and identify objects on the seafloor. The NATO** Science and Technology Organisation,  Centre for Maritime Research and Experimentation (**STO CMRE**) of LaSpezia (Italy) has recently developed an advanced algorithm that will **automate the time-consuming task of mine identification and disposal and further advances in this field will greatly improve MCM operations**.8 Moreover, adding an advanced lightweight hydrophone array to UUVs will improve the capability to detect and localize underwater objects (and will give the UUV an improved secondary ASW capability).9

Likewise, unmanned systems can greatly help MCM operations in the air and on the surface. The experience gathered by DARPA with the ASW Continuous Trail Unmanned Vessel (ACTUV) could be used to create an advanced and completely autonomous MCM ship. Using powerful sensors, advanced automation software and MCM gear, an MCM ACTUV will be able to take many of the tasks now given to the Avenger-class minesweepers. A fully autonomous large fleet of inexpensive unmanned UUVs and USVs could sweep large portions of the sea while avoiding all risk to sailors.

While ships, USVs, and UUVs are the best platforms to neutralize mines, airplanes and helicopters are the fastest platforms to sweep the sea. The laser-based ALMDS (Airborne Laser Mine Detection System) and the unmanned COBRA (Coastal Battlefield Reconnaissance and Analysis System) have recently entered service, but more systems can be deployed in the future.10 **UAVs are the perfect choice for persistent reconnaissance** and can be adapted for the MCM task and augmented to field the COBRA and ALMDS systems.

**While the Navy arguably gives less attention to mine countermeasures than it deserves, it gives even lesser attention to its own offensive mining capability**. If the U.S. Navy wants to maintain a solid deterrent against rivals then it should improve and expand its own mine arsenal. The new Hammerhead mine and the Clandestine Delivered Mine (CDM) are a good step in the right direction and more should follow.11 **But the vast majority of U.S. mines are Quickstrike mines converted from general-purpose bombs.** Dedicated bottom and buried advanced mines (similar to the advanced British Stonefish mine) should be developed and the number of platforms able to deploy mines should be expanded to include UAVs, USVs, and UUVs. Moreover, air-launched mines should get extended-range winged kits similar to those employed by the HAAWC High Altitude ASW Weapons Concept torpedo to give launching aircraft the ability to deploy the mine much further away from enemy positions.12

Until recently the task of minesweeping has been extremely dangerous for sailors, but with new technologies such as unmanned systems and machine learning, **it is time to invest heavily in these avenues of capability** and convert a greater part of the U.S. Navy to fully autonomous and unmanned MCM operations.

The importance of mine warfare and of mine countermeasures for any modern Navy can never be stressed enough. Given how mining can achieve great results and inflict huge losses with relatively low risk and cost argues for greater investment in these weapons and the means to counter them.

**Greater intel sharing and collaboration required for AUVs; NATO’s already got a head-start but doesn’t solve**

Ioseba **Tena and** Jonathan **Davies 21**, Ioseba Tena, Head of Defence at [Sonardyne](http://bit.ly/Sonardynehomepage) and Jonathan Davies, Chief Scientist at Sonardyne, 6/16/21, “Stop, collaborate and listen: the technologies enabling underwater naval communications,” *Navy Lookout*, <https://www.navylookout.com/stop-collaborate-and-listen-the-technologies-enabling-underwater-naval-communications/>, JH

**AUVs themselves are relatively easy to operate, monitor and control, but to communicate** in the depths of the underwater environment, above sea technologies like radio and video are **rendered useless after just some metres**. This puts innovation now firmly in the hands of technologists and physicists to deliver technology solutions involving light and sound, which are still in furious development to take communications to the next level, with security being the number one priority.

To put this into perspective, **we should look at the application uses for subsea technology**. On a single mission, RN AUVs may need to be out of sight for many hours, sometimes even days. Its operators want to know that everything is working optimally, and they will be relying on continuous monitoring and regular status updates. While an AUV is on a survey, the Navy may wish to assign it a task during this exploratory mission, such as to take pictures of a contact or location and, for this reason, communication to the AUV is of key importance. There are a broad range of underwater assets, from large submarine platforms to very low power autonomous sensors sitting on the seabed. The challenge is that there is a larger range of requirements and drivers in terms of what those various assets can do, what sensors they have and how they communicate. They cannot all physically communicate as they cannot always operate in the same frequency. So how do you get all these disparate naval systems to talk to each other?

**NATO’s JANUS communications system**, created in 2017 by its Centre for Maritime Research and Experimentation (CMRE), **was a great start, but the jury is still out in terms of its broader role** as a tactical acoustic communication solution, due to moderate data rate, lack of underpinning transmission security (TRANSEC) layer, and relatively large overheads associated with JANUS protocols, meaning platforms transmit more energy in the water which collectively elevates counter detection and information exploitation risk. The potential adoption of JANUS as a ‘first contact’ handshake protocol, capable of supporting subsequent hand-off to nation-specific waveforms and protocols is a likely direction of travel. This is to balance basic multi-nation interoperability needs, against broader, nation-specific tactical communication needs. **The use of JANUS, of course does not preclude the sharing of sovereign waveforms between allies and partners**, as these are developed and proven over time.

**IUU A/O**

**IUU fishing leads to collapse of ocean governance---leads to maritime insecurity, terrorism, and piracy---only AI tracking solves and multilateral cooperation key**

[Harshita **Kanodia**](http://diplomatist.com/author/harshita123) **22**, [Harshita Kanodia](http://diplomatist.com/author/harshita123) is a Research Associate at Hermes Institute of International Affairs, Security and Geoeconomy. She graduated with a major in economics from the University of Delhi, India, and she had previously worked with international organisations and think tanks, 6/9/22, “IUU Fishing in the Indian Ocean: A Security Threat,” *Diplomatist*, <https://diplomatist.com/2022/06/09/lets-catch-the-big-fish/>, JH

**Even though IUU** (Illegal, Unregulated, and Unreported) **Fishing tops the maritime security threats, the present juncture presents a gloomy picture**. The current maritime security mechanism is beleaguered with non-traditional threats. Moreover, the growing unprincipled actions and coercive tactics in the waters of the Indian Ocean adversely affect the security apparatus of the region.

With stiff competition to assert influence, the strategic arena of the region has undergone a massive change and has resulted in severe economic, security, and environmental consequences. **China’s transition to a supreme power reflects its sheer disregard for international rules** and concerns for the region. Moreover, its illegal fishing activities exacerbate the depletion of crucial fisheries, which satiates Beijing’s hunger for global power and rejuvenation.

**The lack of effective ocean governance is evident from the severe security environment** of the region. Rampant IUU fishing activities defy international laws and intensify the insecurity in national and international waters. Besides, the Regional Fishery Management Organisations (RFMO) inadequacy has become an essential geopolitical matter. The organisational gaps of the global and regional organisations have failed to lessen the strains on the fish stocks of the Indian Ocean.

Navigating the Waters

The Indian Ocean, the host of some of the essential fisheries globally, accounts for over [14 percent](https://www.financialexpress.com/defence/chinese-trawlers-on-the-prowl-in-the-indian-ocean-iuu-pose-the-greatest-maritime-threat/2145847/) of the global wild-caught fish. According to the Information Fusion Centre-Indian Ocean Region (IFC-IOR) reports, there have been [379 and 213 incidents](https://www.wionews.com/india-news/chinas-illegal-unregulated-fishing-in-indian-ocean-poses-challenges-452343) of IUU fishing in IOR in 2020 and the first half of 2021, respectively.

As per a [report](https://www.seafoodsource.com/news/environment-sustainability/new-wwf-report-finds-unregulated-fishing-escalating-in-indian-ocean) by WWF, the unregulated part of IUU fishing is often sidelined. [Regulatory gaps](https://www.seafoodsource.com/news/environment-sustainability/new-wwf-report-finds-unregulated-fishing-escalating-in-indian-ocean) in the high seas of the Indian Ocean are based on both geographical location and species (Chase, 2020). The absence of any squid-monitoring organisation leads to [unregulated squid fishing](https://www.indiatoday.in/world/story/chinese-boats-illegally-hauling-tuna-indian-ocean-1885751-2021-12-09) in the Indian Ocean. [Trygg Mat Tracking](https://www.indiatoday.in/world/story/chinese-boats-illegally-hauling-tuna-indian-ocean-1885751-2021-12-09) found that squid vessels have multiplied six-fold since 2016. Moreover, the use of large nets by such vessels leads to the [by-fishing of non-targeted species](https://www.indiatoday.in/world/story/chinese-boats-illegally-hauling-tuna-indian-ocean-1885751-2021-12-09), especially tuna. The Indian Ocean’s yellowfin tuna, the world’s [most profitable fisheries](https://india.mongabay.com/2021/04/predatory-european-ships-push-indian-ocean-tuna-to-the-brink/), is the most threatened species. The Indian Ocean Tuna Commission (IOTC) has alarmed the concerning levels of the species.

**IUU fishing activities push the security of the international waters to a downright critical level**. [Illegal activities](https://www.cfr.org/article/illegal-fishing-global-threat-heres-how-combat-it) like human trafficking and smuggling of drugs and arms in fishing vessels undermine international ocean governance authority. **Also, illegal fishing jeopardises port security as many local fishers are forced to turn to**[**piracy**](https://www.jstor.org/stable/48531463)**. Often this serves as a facilitator of terror financing and nurtures**[**maritime terrorism**](https://www.jstor.org/stable/48531463)**.**

Besides, unreported fishing has severe environmental ramifications. Trawlers use large nets, which results in the [by-catching](https://link.springer.com/article/10.1007/s12117-014-9228-6) of species like sea birds, turtles, sea mammals, sharks and killer whales. Moreover, the use of [illegal gillnets and explosives](https://link.springer.com/article/10.1007/s12117-014-9228-6) by some vessels to keep whales away from fishing lines pollutes the sea-based and impacts the growth of young fishes.

Excessive and unreported fishing creates ecological imbalances by disrupting the critical food chains. Seafood remains a crucial source of protein for humans globally, and the current polluted environment makes many species unfit for consumption. In addition, the high demand for seafood globally has created a shortage of some species. Consequently, many poorer nations suffer from food insecurity in disrupted supply chains and ceased employment opportunities for local anglers.

The consequential economic woes for the fisheries-dependent littoral states are enormous as it drives millions of small-scale fisheries and fishers out of work. In addition, smaller states that depend on their territorial waters’ fisheries get smacked by larger countries both from within the IOR and outside. As a result, it [negatively impacts](https://link.springer.com/article/10.1007/s12117-014-9228-6) the Gross National Products and lowers the value of legal fish stocks in the market. Moreover, the [loss of revenue](https://link.springer.com/article/10.1007/s12117-014-9228-6) affects ports and vessel maintenance, exerting pressures on the national budgets of these economies.

Besides, the prevalence of predatory behaviour of developed countries, moving tactically in the geopolitical power game, has subverted and suppressed the concerns alarmed by poorer littoral states. This leads to exploitation of the rights of under-developed coastal regions which depend on fisheries export for survival. Moreover, private companies continue to fish unregulated amounts of stocks while threatening the livelihood of small fishing companies.

Let’s catch the big fish

In recent years, the key actors in maritime geopolitics have altered. The Indian Ocean Region (IOR) has been beleaguered by the presence of foreign and non-state actors and intense competition for power. One particularly noticeable actor is China which has strengthened its standing in the ocean through various infrastructural and economic projects.

China’s increasing footprint in the Indian Ocean Region (IOR) postulates a risk of growing port insecurity of the littoral states. Beijing is a signatory of the UNCLOS (United Nations Convention on the Law of the Sea); nevertheless, Chinese boats and research vessels illegally transgress in various [Exclusive Economic Zones](https://www.financialexpress.com/defence/chinese-trawlers-on-the-prowl-in-the-indian-ocean-iuu-pose-the-greatest-maritime-threat/2145847/) in the Indian Ocean and worldwide. In addition, the Indian Navy has also reported illegal deployments of the People’s Liberation Army’s (PLA) research vessels for [deep-sea mining and ISR](https://raisinahouse.org/indo-pacific-vision/f/india-china-power-play-in-the-indian-ocean) (Intelligence, Surveillance & Reconnaissance) activities that threaten the maritime security of the region.

In addition to piracy and “intelligence” activities, **China’s blatant exploitation of fisheries is apparent from its gigantic share in world overseas fishing vessels**. Beijing’s Distant Water Fleet (DWF) has around 17,000 fishing vessels registered in China, while close to [1,000 vessels](https://www.wionews.com/india-news/chinas-illegal-unregulated-fishing-in-indian-ocean-poses-challenges-452343) are lodged under various flags of convenience, as per satellite data. On the other hand, the European Union and the USA have only[289 and 225 registered vessels](https://www.wionews.com/india-news/chinas-illegal-unregulated-fishing-in-indian-ocean-poses-challenges-452343), respectively. The **anticipated figure for China is much higher due to its many unregistered vessels** tagged as [ghost ships](https://www.wionews.com/india-news/chinas-illegal-unregulated-fishing-in-indian-ocean-poses-challenges-452343).

The [Illegal, Unregulated and Unreported Fishing Index](https://iuufishingindex.net/ranking) shows China in the top place globally for 2019 and 2021. The country operates the largest [fleet of trawlers](https://diplomatist.com/2022/06/09/lets-catch-the-big-fish/#chinas-illegal-unreported-and-unregulated-fishing) globally, which the government heavily subsidised, incentivising the operators to plunge into foreign waters. Moreover, these often serve as [surrogates of the PLA](https://diplomatist.com/2022/06/09/lets-catch-the-big-fish/#chinas-illegal-unreported-and-unregulated-fishing) and indulge in surveillance and foreign intelligence activities.

China’s marine transgressions particularly mire the Western Indian Ocean. With depleting resources in the South and East China Seas, Chinese fishing vessels make regular illegal incursions to the [eastern coastline of Africa](https://www.wionews.com/india-news/chinas-illegal-unregulated-fishing-in-indian-ocean-poses-challenges-452343). Additionally, as per reports, Chinese boats with a history of pursuing illicit activities have potentially intruded in the [EEZ of Oman](https://www.statecraft.co.in/article/chinese-boats-illegally-fishing-in-northwest-indian-ocean-report) and Yemen. The sheer exploitation of the waters of Madagascar and Somalia is evident as recently, many [Chinese backed firms](https://news.mongabay.com/2021/08/china-joins-the-foreign-fleets-quietly-exploiting-madagascars-waters/) have fished ashore in these countries.

**Beijing has been heavily involved in**[**unregulated squid fishing**](https://www.statecraft.co.in/article/chinese-boats-illegally-fishing-in-northwest-indian-ocean-report)**activities**, which contradicts the statements by the Chinese government to limit high seas squid fishing. In addition, China illegally hauls massive amounts of tuna as a [by-catch](https://www.statecraft.co.in/article/chinese-boats-illegally-fishing-in-northwest-indian-ocean-report) of squid fishing.

**Furthermore, while the European Union (EU) theoretically has a comprehensive strategy and policy to counter IUU fishing, it exploits distant waters for tuna**. [Overfishing yellowfin tuna](https://www.theguardian.com/environment/2021/mar/05/eu-accused-of-neocolonial-plundering-of-tuna-in-indian-ocean) in the Indian Ocean made headlines, and the EU has faced criticism for being hypocritical and accused by the coastal states of its neo-colonial behaviour. EU members France and Spain fished [70,000 tonnes](https://www.theguardian.com/environment/2021/mar/05/eu-accused-of-neocolonial-plundering-of-tuna-in-indian-ocean) of yellowfin in 2019, which exceeds any resident state’s numbers. With its [fish-aggregating devices](https://www.theguardian.com/environment/2021/mar/05/eu-accused-of-neocolonial-plundering-of-tuna-in-indian-ocean) (FADs), EU ships seamlessly capture massive proportions, overshadowing the local fishing groups and leaving small IOR nations dry. As a result, the population of tuna in the Indian Ocean, specifically yellowfin, is feared to be on the verge of collapse.

The Way Ahead

As fisheries in the IOR continue to languish, creating international and regional synergies to advocate sustainable fishing is imperative. While many countries in the region have formed and implemented national strategies to safeguard their interests, the trends are evidence of continued high unregulated levels of fishing in the Indian Ocean. Moreover, existing regulations and monitoring by international organisations have only gained a low to moderate success as these are often associated with corruption and lousy management.

**A credible and effective Ocean Governance is the best solution to combat this grave maritime threat. The IORA needs to forge partnerships with various existing and upcoming multilateral circles**. A global approach is crucial to unifying forces against this marine menace. Organisations like IOTC, Food and Agriculture Organisation (FAO), and International Maritime Organisation (IMO) need to transform their governing principles to work effectively and independently from the greater power competition.

As the global geopolitical canvas is constantly altering, the nuances of maritime diplomacy and cooperation have come a long way. Multilateral diplomacy efforts to hold rule-flouting states accountable are the need of the hour. Inclusive solutions and result-oriented actions can turn this climate calamity around based on the essence of reformed multilateralism, which reflects contemporary reality. Strengthening regional multilateral fora like the South Asian Association for Regional Cooperation (SAARC) and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) can effectively safeguard their EEZs from foreign fishing fleets and regulate the fishing of endangered species in their national waters. Through a collaboration with the IOTC, such organisations should indulge in information and intelligence sharing to protect the species in familiar waters from overfishing.

The required course of action for the IORA is to revamp its fisheries management strategy and sustainable fishing endeavours. It is necessary to align the fisheries policies of the IORA member states and stricter countermeasures against IUU fishing and put in collective efforts. IORA needs to address the regulatory gaps in its management of fisheries. Maritime strategists stress the need for accountability and better law enforcement of anti-IUU fishing laws. The global fishing industry must be put through more strict regulations and should be penalised to ensure proper enforcement. Developed nations like China, Russia and European countries need to be assigned liabilities for such illegal activities and suffer the economic consequences.

Additionally, IORA needs to identify extremely sensitive areas and sanction more marine protected zones. Finally, by joining forces with various non-governmental and research organisations, the association should finance more research and development projects to help member states build capacity.

With the **advent of artificial intelligence and the advancement of technology**, IORA needs to deploy **more resources to create functional intelligence mechanisms**. Increased investment in marine domain awareness to maintain accurate data on fisheries and monitor the illegal activities of unregistered fishing vessels. **Technological cooperation can prevent IUU fishing and broadly ensure economic stability and secure high seas. Further, marine experts suggest that IOTC should expand its scope in**[**high-tech vessel tracking**](https://www.pewtrusts.org/en/research-and-analysis/articles/2019/06/12/better-vessel-tracking-would-help-fight-illegal-fishing-in-indian-ocean)**.** The existing [Vessel Monitoring Systems](https://www.pewtrusts.org/en/research-and-analysis/articles/2019/06/12/better-vessel-tracking-would-help-fight-illegal-fishing-in-indian-ocean) (VMS) require high coverage and consistency in tracking and data sharing across member states.

Oceans are an indispensable part of the ecosystem, and the protection of marine biodiversity is our responsibility. **The fight against IUU fishing will lead to a domino effect to eliminate maritime insecurity, piracy, and terrorism** and create an economically safer and more secure environment for the coastal states and the world as a whole. Hence, a reliable and sustainable solution by each stakeholder is essential.

**Organized crime causes extinction.**

Guey **Roberts 13**, Weapons of Mass Destructions Policy Specialist and became the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs for the Department of Defense in 2017, “The Nexus of Organized Crime: WMD,” <https://www.hstoday.us/channels/federal-state-local/the-nexus-of-organized-crime-wmd/>

One of the **biggest concerns** we have with regard to **international criminal organizations** and their activities is their **affiliation and collaboration** with **terrorist groups**. The nexus between international criminal organizations and terrorists has resulted in the use of well-established **smuggling networks** that were created for criminal activities now also being used by terrorists for potentially, in particular and of particular concern to the alliance, the **transportation** of **w**eapons of **m**ass **d**estruction and materials that could be used by terrorists for **attacking our cities** and our populations. This is something that we continue to be worried about and continue to work with other international organizations to try to prevent.

Speak about the proliferation of weapons of mass destruction and what’s being done to mitigate this threat.

The **greatest threat** to the alliance is a **terrorist group with a nuclear weapon** and exploding that weapon in one of our cities. We’ve said that this is the **greatest threat** and we continue to worry about those criminal organizations that would facilitate this actually happening.

So, we have looked at, number one, our intelligence and information sharing with partner nations and other international organizations in order to help foster a common understanding of potential WMD proliferation trends and threats by terrorist groups, including the identification of proliferation trafficking networks, financing mechanisms and a potential adversary’s WMD capabilities and intentions.

Obviously, the role of intelligence is key in identifying and assessing these potential threats as well as our vulnerabilities. The other area, of course, is developing the capabilities to defend against and, if necessary, respond to these threats by having the capability to interdict the illicit trafficking of these materials. Again, this involves working very closely with other international organizations, such as INTERPOL and the International Atomic Energy Agency (IAEA), regional law enforcement organizations, and our nations’ own law enforcement and defense organizations.

Speak for a moment on what geographic areas are concerning, are they expanding, how are they being monitored, and where is the greatest threat?

What’s interesting about what we see happening is that terrorist groups and international criminal organizations are utilizing long-standing smuggling routes to try to transport these materials to NATO countries. One of the areas we’re very concerned about is, for example, central Asia where a number of the countries in the former Soviet Union still have thousands of **radioactive sources**, which were originally used for a variety of legitimate purposes, but are now are totally **unsafe-guarded**.

They’re not protected, they’re not secure, and they **could easily be** harvested by **criminals** or terrorist groups. They could then be smuggled out of these countries and subsequently shaped into a weapon or put into a weapon-a radiological weapon for example–and detonated in one of our countries. Over the last 20 years the IAEA has tracked thousands of attempts at trafficking and selling these materials. So, the smuggling routes of particular concern are those through the Caspian Sea region, on into the Black Sea area, and then into the Balkans and up into Western Europe.

**EU CP**

**EU fails; UK is key to submarine infrastructure**

**Staff 22**, 5/17/22, “UK Invests More Than £2 Billion To Boost Dreadnought Submarine Programme,” *Naval News*, <https://www.navalnews.com/naval-news/2022/05/uk-invests-more-than-2-billion-to-boost-dreadnought-submarine-programme/#:~:text=Defence%20contracts%20worth%20more%20than,submarine%20nuclear%20deterrent%20programme%20%E2%80%93%20Dreadnought>, JH

**Defence contracts worth more than £2 billion have been awarded to**[**BAE Systems**](https://www.baesystems.com/en/home) and [Rolls-Royce](https://www.rolls-royce.com/) to begin the third major phase of the future submarine nuclear deterrent programme – Dreadnought.

With the overall programme supporting around 30,000 jobs across the UK, from design through to build, Delivery Phase 3 (DP3) represents the most significant stage of the Dreadnought programme so far. In 2021 alone, it supported around 13,500 jobs in the Northwest of England and a further 16,300 over the rest of the UK, making a significant contribution to the Government’s levelling-up agenda.

**The investment is the latest financial commitment** between the Ministry of Defence, BAE Systems and Rolls-Royce, and is the initial investment within a planned overall total of nearly £10 billion for the whole delivery phase.

DP3 will see the first of four submarines, HMS Dreadnought, exit the Barrow-in-Furness shipyard to begin sea trials, laying the foundation to sustain the Continuous at Sea Deterrence (CASD) for as long as the international security situation makes it necessary.

**The Dreadnought programme also brings huge benefits to the BAE Systems’ Submarines Academy** for Skills and Knowledge, based at the Barrow-in-Furness site. Opened in 2018, the academy is currently training more than 1,050 apprentices and graduates, with a further 230 craft apprentices, 110 degree apprentices and 90 graduates set to join this year.

The Dreadnought Class will be one of the most complex machines ever built and it will operate in one of the most hostile environments on the planet.

As the largest Class of submarines ever built for the Royal Navy, each will boast 26.4 miles of pipework and more than 20,000 cables stretching 215 miles – further than travelling between London and Leeds.

The four Dreadnought-Class submarines, each the length of three Olympic swimming pools, will maintain the CASD, responsible for safeguarding our national security and way of life, as long as the international security situation makes it necessary.

**Looking ahead**[**, a £160 million contract has been awarded to Raytheon UK for the Dreadnought crew training at HM Naval Base Clyde**](https://www.navalnews.com/naval-news/2022/05/elbit-systems-uk-to-engineer-training-technologies-for-the-royal-navys-future-dreadnought-submarines/). This will see more high-quality jobs being based on the Clyde, further highlighting the importance of the base and the Dreadnought programme to Scotland and the defence of the UK and its allies.

Supporting the UK Government’s levelling-up ambitions, this contract will support the training and development of the Royal Navy men and women who will take to the water when HMS Dreadnought enters service in the early 2030s.

**Uniltat CP---aff**

**US ASW must work with allies to fulfill commitments, otherwise unilateral action fails due to lack of planning and interoperability**

Robert **Wittman 22**, Robert Joseph Wittman is an American politician serving as the U.S. representative for Virginia's 1st congressional district and is the ranking member of the Sea power and Projection Forces Subcommittee, March 2022, “The Nation Needs a Real Plan to Grow the Navy,” U.S. Naval Institute, https://www.usni.org/magazines/proceedings/2022/march/nation-needs-real-plan-grow-navy

**Russia’s aggressive and intolerable invasion of Ukraine serves as a wakeup call** for the United States. Russian leader Vladimir Putin invaded a free and independent democracy on the threshold of the NATO alliance. Each passing day of Russian attacks on Ukraine, [and Moscow’s requests for Chinese military aid](https://www.reuters.com/world/russia-seeks-military-equipment-china-after-ukraine-invasion-reports-2022-03-13/), require the United States to take a hard and clear look at the eroding deterrent value of its conventional forces—not only in Europe, but around the world. As the Biden administration prepares to release its National Defense Strategy, nuclear posture review and missile defense review, along with a delayed budget request for fiscal year 2023, the White House must acknowledge that we are at a turning point in world history. Our adversaries have unequivocally demonstrated their willingness to violate the territorial integrity of another state. **We must ensure our allies and partners** know U.S. promises are ironclad—the United States will defend the rules-based international system and the peace and prosperity it has generated around the world.

Investments in national defense must reflect a sober commitment to uphold U.S international obligations, counter malign efforts of our opponents, and secure a safer world for future generations. As the United States shores up the strength of the U.S. military for a degrading security environment, Congress is uniquely charged under Article 1, Section 8 of the U.S. Constitution to “provide and maintain a Navy.” In this new era, our ability to project power across and under the seas must be unquestioned. The U.S. cannot afford fuzzy and ever-shifting naval shipbuilding plans that suffer during execution. The defense budget request for FY23 must be accompanied by a future years defense program and a 30-year shipbuilding plan that demonstrate a simultaneously ambitious—and realistic—approach to maintaining the primacy of U.S. naval forces.

**Congress has not received a true 30-year shipbuilding plan from the Department of Defense in two years.** In December 2020, the Trump administration released what was termed [Battle Force 2045](https://media.defense.gov/2020/Dec/10/2002549918/-1/-1/1/SHIPBUILDING%20PLAN%20DEC%2020_NAVY_OSD_OMB_FINAL.PDF), more formally known as the Report to Congress on the Long-Range Plan for Construction of Naval Vessels.  The plan was notable for two reasons. First, it broke with the findings of the Navy’s 2016 force structure assessment that advised building a future fleet of 355 battle force ships. Instead, Battle Force 2045 set a goal of 403 battle force ships by FY45, and was estimated by the Congressional Budget Office to cost a [little more than $1.0 trillion in 2021 dollars over 30 years](https://www.cbo.gov/system/files/2021-04/57091-Shipbuilding.pdf%22%20%5Cl%20%22page=6). Second, the plan was released as President Trump left office, so the Biden administration was free to make changes. Yet, the Navy’s subsequent [shipbuilding plan for FY22](https://media.defense.gov/2021/Jun/17/2002744915/-1/-1/0/PB22%20SHIPBUILDING%20PLAN%20JUNE%202021_FINAL.PDF) protested that studies were ongoing, failed to provide a 30-year plan, and instead proposed potential ranges of between 321 and 372 total battle force ships—not including unmanned vessels. As neither plan has proven durable—or adequate in the case of the FY22 document—the Navy’s true goals remain unclear.

**It is difficult to overstate the ramifications of DoD’s blatant willingness to shirk this responsibility. Congress is forced to make funding decisions for the Navy and Marine Corps with incomplete information** about how the Sea Services intend to meet the challenges of their future operating environments. America’s shipbuilding defense industrial base and its workforce—including welders, engineers, pipefitters, and many others—are plunged into years of uncertainty**. Our allies and partners are left to draw their own conclusions** about our commitment to addressing shared strategic concerns. Navy Secretary Carlos Del Toro’s [belief that Congress is amenable to ranges of ships](https://www.defenseone.com/policy/2022/03/navys-new-30-year-shipbuilding-plan-will-avoid-detailsagain/362988/) in the 30-year shipbuilding plan is a fallacy and embraces the current failure to define clear requirements. Last year’s one-year “30-year” shipbuilding submission proposed a range of ships that only pushes Congress to race to the lowest common denominator and accept the bare minimum number of ships. This pattern is untenable.

**Our adversaries do not suffer from any such lack of clarity.** DoD’s annual report to Congress—[Military and Security Developments Involving the People’s Republic of China](https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF)—laid out the CCP’s shipbuilding prowess in no uncertain terms. While the United States debates how and if to build a fleet of 355 vessels, China has already secured that inventory, making the People’s Liberation Army Navy (PLAN) the largest in the world. Further, per the report, “the PLAN’s overall battle force is expected to grow to 420 ships by 2025 and 460 ships by 2030,” with fleet growth largely driven by additional major surface combatants. **DoD estimates also suggest that China will develop a ballistic missile submarine force capable of holding the United States at risk** by 2030 with a mix of roughly eight Type 094 and improved Type 096 nuclear-powered ballistic-missile submarines.

China’s naval modernization poses a grave threat to the ability of the U.S. Navy to secure control of blue-water ocean in the western Pacific during a potential crisis. The window to tighten such disparities with China is closing rapidly. Last year, the outgoing and current commanders of U.S. Indo-Pacific Command,  Admirals Philip Davidson and John Aquilino, [testified](https://www.armed-services.senate.gov/imo/media/doc/21-14_03-23-2021.pdf) that China could try to resolve its dispute with Taiwan using military force by 2027. Admiral Davidson’s assessment was sobering: “Taiwan is clearly one of [China’s] ambitions. . . . And I think the threat is manifest during this decade, in fact in the next six years.” Inescapably, quantity has a quality of its own, and China has secured the lead.

The responses from the White House to date, however, reflect neither urgency nor vision. In the absence of a real China strategy or National Defense Strategy—and with no meaningful changes made in the recent Global Posture Review—the Biden administration’s [Indo-Pacific Strategy](https://www.whitehouse.gov/wp-content/uploads/2022/02/U.S.-Indo-Pacific-Strategy.pdf) references security as an afterthought, with the fourth line of effort for the region listed as “bolster[ing] Indo-Pacific security.”  More broadly, the administration explained that the “decisive decade before us will determine if the region can confront and address climate change, reveal how the world rebuilds from a once-in-a-century pandemic, **and decide whether we can sustain the principles of openness, transparency, and inclusivity that have fueled the region’s success**.” But these tenets miss the most consequential and immediate threat facing the Indo-Pacific—China’s alarming military buildup and its threat to the independence of Taiwan and freedom of the seas in the western Pacific.

As harbinger of tests to come, China consistently demonstrates its willingness to violate Taiwan’s sovereignty. In a span of just four days this past October, [Taiwan reported](https://www.reuters.com/world/asia-pacific/taiwan-says-needs-be-alert-chinas-military-activities-2021-10-05/) 148 Chinese planes had flown in its air defense identification zone (ADIZ). And just one day after China’s foreign ministry said that Taiwan is “not Ukraine,” nine Chinese aircraft flew into Taiwan’s ADIZ. China is also telegraphing its global ambitions beyond the Indo-Pacific via efforts including the Chinese Belt and Road Initiative (BRI). Through the BRI, China finances development projects in partner nations, but those nations often become unavoidably indebted to China as a result. [Djibouti, for example, is burdened by significant debt to China](https://economictimes.indiatimes.com/news/defence/china-widens-presence-in-indian-ocean-through-massive-inroads-in-djibouti/articleshow/86676234.cms?from=mdr) as a result of bilateral economic and infrastructural agreements, and [provided China with its first overseas military base at the entrance of the Red Sea](https://media.defense.gov/2021/Nov/17/2002894852/-1/-1/1/JIPA%20-%20SAXENA%20-%20AFRICA.PDF)—a choke point for major international shipping lanes.

Fortunately, some U.S. defense leaders recognize the challenge despite the clear, although unstated gap, between the White House and Defense Department. Recently, [Assistant Secretary of Defense for Indo-Pacific Affairs Ely Ratner](https://armedservices.house.gov/hearings?ID=A4C3719C-F05F-497B-9BDF-8773CD27ABE1) explicitly told Congress: “With China as the pacing challenge, Taiwan is the pacing scenario, driven by a strategy of denial.” With this supposed urgency of planning should come seriousness of intent, tangible changes to posture, notable increases in investment, imaginative shifts in concepts, and finally, longer-term certainty for the U.S. Navy and its shipbuilding industrial base in the form of clear and concrete ship-construction plans.

The United States can deliberate no longer; now is the time for action. China is rapidly expanding its fleet; it has developed long-range missiles to hold foundational components of U.S. strength, including carrier strike groups and forward bases, at risk, increasing the complexity of U.S. and allied security challenges in the region. The People’s Liberation Army counts on continued American indecisiveness. We must prove them wrong. Congress can provide weight to the Biden administration’s underwhelming Indo-Pacific Strategy by turning words into actions. The aspirational fleet of Battle Force 2045 should not be abandoned. Concrete steps are required in the short-term to shore up the U.S. shipbuilding industrial base for future growth. The United States can achieve these goals by investing rapidly to expand the capacity and capabilities of its naval ships and facilities over the next five years and beyond to hold China’s navy at risk.

Renewed commitments to American sea power cannot come soon enough. **The Navy’s current fleet of approximately 297 battle force ships does not match operational requirements**. Indeed, the Navy maintains a forward presence of roughly 100 ships at sea, resulting in an [operational tempo of roughly 28 percent, or](https://www.heritage.org/military-strength/assessment-us-military-power/us-navy) “nearly double the [operational tempo] that characterized the Cold War.” Requirements for forward naval presence will not abate as China’s assertiveness grows. Without substantial investments in more ships with improved capabilities, the Navy will be strained further as more wear and tear is placed on each hull. This equation is well known, and the Navy has tried to grow its fleet since 2016 as a result. Recognition of the problem and subsequent insufficient action, however, only makes DoD’s recent failures to deliver a workable plan to grow the fleet more disappointing.

More troubling still, **the Department of Defense continues to make compounding decisions that do not reflect the urgency of the challenges** facing the Navy today, or over the horizon.

Last year, the Navy requested just a single new Arleigh Burke–class destroyer—brazenly demonstrating a willingness to violate its contract obligations without action from Congress. It requested zero additional amphibious ships and proposed the retirement of seven of our largest surface combatants. The firepower of those seven ships alone exceeds that of the entire Royal Navy. While DoD proposed shrinking the fleet and cutting the Navy’s shipbuilding budget, China continues investing in its surface and undersea forces.

**US capabilities are outdated and undersupplied---ally aid is necessary to solve**

Lieutenant Commander **Jon Paris 19**, Lieutenant Jon Paris is a U.S. Navy Surface Warfare Officer, has served aboard both a destroyer and cruiser, in both Weapons and Navigation Department, served as a Navigation Instructor at the U.S. Naval Academy and as a Flag Aide, and he is a prospective destroyer Operations Officer, 7/15/19, “The Future of Mine Countermeasures,” *U.S. Naval Institute*, https://blog.usni.org/posts/2019/07/15/the-future-of-mine-countermeasures

The U.S. Navy is focused on high-end warfare—engaging antiship cruise missiles, defeating hypersonic weapons, protecting the homeland and allies from ballistic missiles, and operating the air wing far from shore in a command-and-control degraded environment. We are focused on defeating those we sometimes still call “near-peer” competitors. Our fleet’s muscle will not make it to the high-end fight, though, if it fears the deceptively destructive naval mine. **Make no mistake, though not flashy, mine warfare is relevant today.** The U.S. Navy generally subscribes to the notion that mines are used by lesser forces and are to be defeated by stronger navies.[1] History shows us otherwise, though. How do we combat mines in a 21st-century Navy? The answer does not require reinventing the wheel. The Fleet-tested platforms, complete with resident knowledge on board, exist. The answer involves following a path the Navy has been down before—updating and improving upon a legacy platform and reintroducing it to the fleet. Surface-borne mine countermeasures deserves its fair share of attention—from the service, from the surface community, and from resource sponsors. The Navy should make what is old, new again—build and deploy a 21st-century Avenger.

Mines are inexpensive. They present a fiscally efficient option to foes with a substantial return on investment. They are easy to deploy and are difficult to combat. They are stealthy and disrupt the world’s sea lanes and are built to guarantee a mission kill. Just the threat of their use or the rumor of their presence has immediate tactical and strategic impact, whether it be merchants avoiding chokepoints or harbors, causing untold damage to the economy, or billion-dollar naval vessels held at arm’s length, allowing belligerents to buy time and achieve objectives. The challenges posed by deterring, detecting, and defeating them make their threat to the U.S. Navy worthy of a serious reinvestment in time and resources.

**The Avenger-class minesweeper, the U.S. Navy’s only surface-borne mine countermeasures asset, is more than 25 years-old and past its prime**. The state of the Navy’s minesweeper fleet is notorious, primarily stemming from critical parts shortages and a shore establishment focused on other priorities, ill-postured to support the aging and unique equipment on board these wooden ships. They often are unable to get underway for myriad material and equipment issues, and are not, in the opinion of some, ready to meet the operational mission for which they are designed and deployed—both in numbers and readiness. **The fight to keep equipment running on board the ship and supplies flowing outside the lifelines is like flailing in quicksand**. The parts are often out of stock or obsolete. The companies that made them are out of business or have moved to other production. The warehouse shelves regularly leave the ships wanting. And the parts that do exist were, in many cases, not built to work in today’s threat environment or amongst modern standards. None of these gripes—not one–are an indictment of the platform or its sailors, nor the valiant shore establishment that works to keep them running. The Avenger-class minesweeper—capable of minesweeping and mine hunting—is a good ship and it is the right one for the job. We do not need a new, untested platform. We need updated and upgraded versions of this proud class of ships in the fleet, forward-deployed and ready to fight tonight.

In this day of advanced systems and weaponry—in a fleet dominated by Aegis—and with the rising specter of nuclear weapons-armed adversaries, why must we bother with building, fostering, and caring for a robust mine countermeasures capability? It seems logical to place our focus elsewhere. That said, **the edge our well-funded priorities are supposed to give us will be dulled if those high-end assets cannot get to the fight**. One also must consider that the Navy’s mandate is not simply to defeat enemies, but to keep open and free the world’s sea lanes of communication. It may seem far-fetched, but enemies with mines have the potential to severely bog down U.S. forces and could, in theory, cause a level of damage deemed unacceptable by leaders, government, and the American people. Belligerents with naval mines have the ability to shape the battlespace in their own vision—we must preserve our own capability to rip the seaways back from them, kick in their door, and allow a stacked-up Fleet to follow in the minesweeper’s wake with peace of mind and certainty of victory.[2]

Still asking: “why?” Because, while more than 50 countries boast a naval mine inventory, the five most likely—or current— [U.S. adversaries all command a massive stockpile](https://breakingdefense.com/2015/03/shutting-down-the-sea-russia-china-iran-and-the-hidden-danger-of-sea-mines/) and the ability to lay mines nearly unimpeded by American forces.[3] Russia and China are estimated to have more than 100,000 mines each. Some believe North Korea has more than 50,000 mines. Iran’s stockpile is estimated in the thousands. Even the Houthi rebels, funded largely by Iran and al-Qaeda, are fielding low-tech, [improvised naval mines in the Red Sea](https://www.maritime-executive.com/article/saudi-forces-find-more-naval-mines-off-yemen) and along Yemen’s western coast, forcing an international response. Russia can exert influence throughout Europe, the Mediterranean and Black Seas, and in the Northern Pacific. China can hold us at bay. North Korea can make reinforcing our allies to the South very difficult. Iran can, in theory, shut down access to the Arabian Gulf, causing potentially calamitous impact to the world economy. And a terrorist organization has shown interest in a warfare area that can disrupt the choke-point connecting Europe to the Arabian Peninsula, Africa, and beyond. Our potential enemies have the resources to stop, or slow us down, in every area of operations we care about. The mine threat is real. And yet, the future of the Navy’s surface-borne mine countermeasures forces is unclear.

**The current crop of Avenger-class mine countermeasures ships are old, tired, and too often, broken. The outdated equipment does not operate reliably, having a negative effect on operational tempo and the proficiency of the crews.** Avengers mostly go unused, solemn monuments to a time when the U.S. Navy looked beyond air and missile defense, set alongside otherwise active piers. In a bittersweet quirk, though, the contrast between the condition of the ships and their crews is staggering. These ships are crewed by phenomenal men and women who are motivated and passionate about their ships. There is a fraternal pride, and unstopping zeal, oozing through the pores of these small, wooden ships. That esprit de corps—that pride in being the toughest Sailors on the block—comes from the fact that at their foundation, these ships are great ships. They are, in theory, incredibly capable, boasting both minesweeping and mine hunting capabilities—unique amongst the world’s navies—with well-thought gear and advantageous construction. This reality makes their fall from grace more frustrating. Though they have withered from the vine, their keel marks the future of surface-borne mine countermeasures.

Updating, upgrading, and reintroducing a legacy platform is ingrained in the service’s DNA—the Navy has done it throughout its history. In the surface fleet, a tangential example is the Arleigh Burke-class destroyer, rolled out in its original specifications and updated in new construction via follow-on flights, or variants, effectively replacing, or augmenting, early hulls with further evolved variants of the same ship. An example more in line with the 21st-century Avenger, though, is that of the F/A-18 Hornet and its much younger cousins, the Super Hornet and Growler. The Hornet entered service in 1984 and the [Super Hornet](http://www.ausairpower.net/SuperBug.html)did likewise in 2001, replacing the F-14 Tomcat; though largely a new aircraft, it was explicitly based on an asset with a 16-year-old airframe. The EA-18G Growler, itself an even more specialized variant of the Super Hornet, entered service in 2008 and gradually replaced EA-6B Prowlers—another example of expanding upon an existing platform. In these cases, the Navy proved that what is old can be new again. While new and evolutionary platforms are staples of the world’s greatest military might, there are times when the warfighter simply needs a new version of what they currently have. **Designing a new platform from the keel-up takes excessive time, loads of money, and the burden of competition**—all hallmarks of the Department of Defense’s acquisition labyrinth. There is an opportunity here for the Navy to jump back into the surface mine countermeasures game quickly and in a fiscally responsible manner. Build the fleet a new Avenger and get them back into the fight!

More than anything else, the Navy’s updated mine countermeasures ship needs to be sustainable. Self-sufficiency is critical and a well-stocked supporting shore infrastructure will be the foundation of the class’s success. Durable nonmetallic parts, currently a misnomer, are a must, and making use of emerging 3D-printing technology—already proven on Navy ships—will ensure longevity and the ability to affect prompt repairs. Sturdy, high-capacity air conditioners and the associated sea water pumps and strainers will ensure the ship’s combat systems are appropriately cooled and a semblance of quality of life is maintained for the crew. The new ships will need new, more powerful diesel engines, capable of producing higher speeds over longer distances at an efficient fuel burn rate. **The engineering plants also will need an updated**, reliable bow-thruster, giving ships increased independence in-port and a superior capability while mine hunting. Along with the bow-thruster, a gas-turbine generator encased in an appropriate module, like its counterparts throughout the fleet, will guarantee the ship’s unique capabilities and keep the crew and associated equipment safe. Upgraded means—whether it be SHF, EHF, or a commercial off-the-shelf (COTS) solution—to achieve and maintain IP services will be extremely important. The combat systems suite also needs to add Link-16 capability, which will come in handy when dealing with Navy and allied forces around a minefield, and an infrared-capable optical sight system to allow watch standers to identify surrounding contacts on the horizon day and night. To best achieve the benefits of the surface force’s recent focus on a circadian rhythm for shipboard watch standers—arguably critically important to the crew executing a slow and drawn-out mission —the new MCM would benefit from an increase in crew size from 86 to 110, and thus an average of 23 new racks and associated berthing accommodations. At a minimum, the additional rack space would allow a faithful attempt at providing for an explosive ordnance disposal berthing, thus ensuring that the future Avenger is able to fold into the mine countermeasures triad and expand its capabilities through distributed lethality. And, last but not least, the Navy needs more of these updated hulls—at least six in every forward deployed location—to ensure operational commanders’ demands can be met in a contingency.

There are excellent and exciting new technologies entering the Fleet and they no doubt have a positive impact today and will in years to come. But mine countermeasures is a unique warfare area. Its future largely lies in its past. Emerging Littoral Combat Ship capabilities and unmanned technologies may serve as fine supplements, but the clearing of strategic waterways is painstaking work requiring the collective knowledge of the fleet’s minemen, engineers, and the tactical experts at the Navy Surface and Mine Warfare Development Center. The Avenger­-class minesweeper was a fantastic platform when first conceived, but now it is ready to retire. Not only would a 21st-century Avenger build on the capabilities of a time-tested platform, ensuring timely and capable mine countermeasures forces to fleet commanders, but reinvesting through innovation as we improve upon the legacy class will keep early command opportunities alive and well in the Navy’s surface warfare officer community—building future commanders and keeping mine warfare at the forefront of our future leaders’ collective consciousness.

**US fails at ASW capabilities and MCM is still being tested**

Megan **Eckstein 21**, Megan Eckstein has covered military news since 2009, with a focus on U.S. Navy and Marine Corps operations, acquisition programs, and budgets, 1/11/21, “Wanted: New missions for the littoral combat ship,” *Defense new*, https://www.defensenews.com/naval/2022/01/11/wanted-new-missions-for-the-littoral-combat-ship/

 Surface navy leaders are turning to fleet commanders for ideas about how they want to use littoral combat ships, as the U.S. Navy tries to refine its operational concepts for these ships.

Development on the LCS mission packages began in the early 2000s and centered around three warfare areas: surface warfare, mine countermeasures and anti-submarine warfare.

So far, only the surface warfare mission package has been fully fielded and used in overseas deployments. Half of the MCM package — the three components operated from helicopters, as opposed to the other three deployed from in-water unmanned vehicles — has been used by LCSs in the Indo-Pacific, with the remaining systems still pending final testing and approval for deployment later this fiscal year.

**The ASW package**, which appeared almost ready for primetime in 2016 and again in 2019**, is still not ready after testing last year turned up new technology issues.**

Now, as the surface navy tries to make the case for these LCS ships, even as budget pressure mounts, services leaders are considering how fleet commanders could use LCSs in emerging operating concepts.

“We weren’t sure LCS was executing the missions it was designed for. And so we ... went out to the number fleet commanders and said, ‘Alright, what do you want it to do? And what missions do you want it to execute based on the environment we’re in now?’” Commander of Naval Surface Forces Vice Adm. Roy Kitchener told reporters in a Jan. 7 media roundtable.

**US Navy lacks the resources; NATO resource pooling is key**

Rob **Wittman 20**, U.S. Rep. Rob Wittman, R-Va., is the ranking member of the Sea power and Projection Forces Subcommittee, 5/8/20, “The US Navy’s modernization rush must not harm mine countermeasures,” *Defense News*, https://www.defensenews.com/opinion/commentary/2020/05/08/the-us-navys-modernization-rush-must-not-harm-mine-countermeasures/

**While the U.S. Navy has focused its research and funding on countering emerging threats** such as advanced radars and hypersonic missiles, a time-tested threat waits patiently in the waters around the globe; and if we ignore the lessons of history, a centuries-old technology could lead to our defeat. **Mine warfare**, like public health, is an area that **rarely attracts attention or significant investment until a crisis emerges**. We should not wait until American lives are in peril before we take action.

We need to change course immediately. First, the Navy must maintain its existing mine countermeasures forces until a credible replacement is fielded. Second, the **Navy must make a significant investment to recapitalize** the mine countermeasures force both in time and quantity to deliver a credible force.

Unfortunately, **the Navy has spent billions of dollars and wasted precious years pursuing a mine countermeasure module program that, even if it worked as advertised, would have neither the capability nor the capacity to effectively counter** an enemy mine threat anticipated in our National Defense Strategy.

**Add-ons**

**2AC --- Disasters A/O**

**Domain awareness key to minimize natural disaster impacts and enforce environmental regulations**

**Das ‘21**

(Arnab, Dr(Cdr) Arnab Das is Founder & Director, Maritime Research Centre (MRC), “The Underwater Domain Awareness Framework: Infinite Possibilities in the New Global Era,” pg online @ <https://indiafoundation.in/articles-and-commentaries/the-underwater-domain-awareness-framework-infinite-possibilities-in-the-new-global-era/> //um-ef)

The concept of Underwater **Domain Awareness** (UDA) in a more specific sense **will translate** to our eagerness to know what is happening in the undersea realm of our maritime areas. This keenness for undersea awareness from the security perspective means defending our Sea Lines of Communication (SLOC), coastal waters and varied maritime assets against the proliferation of submarines and mine capabilities intended to limit the access to the seas and littoral waters. However, **just the military requirement may not be the only motivation to generate undersea domain awareness**. The earth’s undersea geophysical activities have a lot of relevance to the wellbeing of humankind and monitoring of such activities **could provide vital clues** to **minimise the impact of devastating natural calamities**. The commercial activities in the undersea realm need precise inputs on the availability of resources to be able to effectively and efficiently explore and exploit them for economic gains. **The regulators** on the other hand **need to know the pattern of exploitation to manage a sustainable plan**. With so much of activities, commercial and military, there is **significant impact on the environment**. Any conservation initiative needs to precisely estimate the habitat degradation and species vulnerability caused by these activities and assess the ecosystem status. The scientific and the research community needs to engage and continuously update our knowledge and access of the multiple aspects of the undersea domain. Fig. 2, presents a comprehensive perspective of the UDA framework. The underlying requirement for all the stakeholders is to know the developments in the undersea domain, make sense out of these developments and then respond effectively and efficiently to them before they take shape of an event.

**Natural disasters cause extinction and outweigh**

**Sid-Ahmed 5** [Mohamed, Al-Ahram Weekly Editor, Jan 6, “The post-earthquake world,” http://weekly.ahram.org.eg/2005/724/op3.htm]

The human species has never been exposed to a natural upheaval of this magnitude within living memory. What happened in South Asia is the ecological equivalent of 9/11. Ecological problems like global warming and **climatic disturbances in general threaten to make our natural habitat unfit for human life. The extinction of the species has become a very real possibility**, whether by our own hand or **as a result of natural disasters** of a much greater magnitude than the Indian Ocean earthquake and the killer waves it spawned. Human civilisation has developed in the hope that Man will be able to reach welfare and prosperity on earth for everybody. But now things seem to be moving in the opposite direction, exposing planet Earth to the end of its role as a nurturing place for human life. Today, **human conflicts** have become less of a threat than the confrontation between Man and Nature. At least they **are less likely to bring about the end of the human species. The reactions of Nature** as a result of its exposure to the onslaughts of human societies **have become more important in determining the fate of the human species** than any harm it can inflict on itself. **Until recently, the threat Nature represented was perceived as likely to arise only in the long run**, related for instance to how global warming would affect life on our planet. Such a threat could take decades, even centuries, to reach a critical level. **This perception has changed following the devastating earthquake and tsunamis** that hit the coastal regions of South Asia and, less violently, of East Africa, on 26 December. This cataclysmic event has underscored the vulnerability of our world before the wrath of Nature and shaken the sanguine belief that the end of the world is a long way away. **Gone are the days when we could comfort ourselves with the notion that the extinction of the human race will not occur before a long-term future** that will only materialise after millions of years and not affect us directly in any way. **We are now forced to live with the possibility of an imminent demise of humankind.**

**2AC/1AR --- Disasters Impact**

**Crisis response is key to prevent failed Asian states---solves war**

Timothy **McGeean 17**.Commander, U.S. Navy. “Proceedings Magazine. A War Plan Orange For Climate Change.” https://www.usni.org/magazines/proceedings/2017-10/war-plan-orange-climate-change

**PaCom** already faces the **full range** of **natural disasters** in the Asia-Pacific. Between 1970 and 2014, natural disasters accounted for more than 2 million deaths in the Asia-Pacific, 57 percent of the global total. 13 Admiral Locklear routinely told his subordinate commanders, “While you’re here you may not have a conflict with another military, but you will have a natural disaster that you have to either assist in or be prepared to manage the consequences on the other side.” The **vastness** of PaCom’s **area of responsibility** coupled with the **increased frequency** of natural disasters may spread thin PaCom’s forces as they execute humanitarian assistance/disaster relief (**HADR**) operations. These response operations are **critical**, as the **emergent needs** of **domestic populations** and/or **migration of displaced persons** can **stress fragile governments** beyond their ability to cope. This **breakdown of the social contract** sets conditions that **lead to instability**, which can **quickly spread** across national boundaries and **lead to wider conflict**. PaCom has a **vested interest** in maintaining stability: five of the seven U.S. collective defense treaties apply to nations in the region.

**2AC/1AR --- Forecasting key**

**Natural Disasters are coming and put millions at risk. Improved forecasting is key to mitigation.**

**Huppert ‘6**

(et al; Professor Herbert Eric Huppert is an Australian-born geophysicist living in Britain. He has been Professor of Theoretical Geophysics and Foundation Director for The Institute of Theoretical Geophysics at Cambridge University since 1989 – “Extreme natural hazards: population growth, globalization and environmental change” – From the Journal: Philosophical Transactions A – Each issue of Philosophical Transactions A is devoted to a specific area of the mathematical, physical and engineering sciences. This area will define a research frontier that is advancing rapidly, often bridging traditional disciplines. All articles are peer reviewed and edited to the highest standards. We currently publish 24 issues per year and, along with all Royal Society journals, we are committed to archiving and providing perpetual access. Aug 15th – Ev was modified for gendered language. I also added a comma in “10,000” to make the ev easier to read. http://rsta.royalsocietypublishing.org/content/364/1845/1875.long#aff-1)

(Hu)mankind is becoming ever more susceptible to natural disasters, largely as a consequence of population growth and globalization. It is likely that in the future, we will experience **several disasters per year** that kill more than 10,000 people. **A calamity with a million casualties is just a matter of time.** This situation is mainly a consequence of **increased vulnerability**. Climate change may also be affecting the frequency of extreme weather events as well as the vulnerability of coastal areas due to sea-level rise. Disastrous outcomes can only increase unless better ways are found to mitigate the effects through **improved forecasting** and warning, together with more community preparedness and resilience. There are particular difficulties with extreme events, which can affect several countries, while the largest events can have global consequences. The hazards of supervolcanic eruptions and asteroid impacts could cause global disaster with threats to civilization and deaths of billions of people. Although these are very rare events, they will happen and require consideration. More frequent and smaller events in the wrong place at the wrong time could have very large human, environmental and economic effects. A sustained effort is needed to identify places at risk and take steps to apply science before the events occur. The natural world can be a dramatic, dynamic and dangerous place. Life ultimately thrives on Earth because it is a dynamic planet, but the extremes of nature can threaten the survival of individuals, communities and even species. Every year television pictures and newspapers report scenes of devastation, despair and death caused by huge earthquakes, floods, droughts, cyclones, landslides and volcanic eruptions. The Asian tsunami, with around 250 000 deaths, huge economic losses and long-term damage to development programmes in the affected countries, brought home to the world the realities of the danger. We live in times of increasing vulnerability to extreme natural hazards. The Asian tsunami was a truly global disaster which affected not only many countries in the region, but also tourists from the developed world on holiday in southeast Asia. For example, the incident represented the greatest loss of life of Swedish citizens from a natural event. Again, Hurricane Katrina, which devastated New Orleans in September 2005, had global effects on oil prices and showed that even the world's most powerful and wealthy country experiences difficulties with the extremes of nature.

**AT: T**

**2AC---SC---Must be DOD**

**1. We meet:**

**a) function. It's the DOD**

**DOD No date**, Federal Register, https://www.federalregister.gov/agencies/defense-department#:~:text=The%20Department%20of%20Defense%20is,and%20women%20on%20active%20duty

**The Department of Defense is responsible for providing the military forces needed to deter war and protect the security of our country. The major elements of these forces are the Army, Navy, Marine Corps, and Air Force,** consisting of about 1.3 million men and women on active duty. They are backed, in case of emergency, by the 825,000 members of the Reserve and National Guard. In addition, there are about 600,000 civilian employees in the Defense Department. Under the President, who is also Commander in Chief, the Secretary of Defense exercises authority, direction, and control over the Department, which includes the separately organized military departments of Army, Navy, and Air Force, the Joint Chiefs of Staff providing military advice, the combatant commands, and defense agencies and field activities established for specific purposes. The National Security Act Amendments of 1949 redesignated the National Military Establishment as the Department of Defense and established it as an executive department ([10 U.S.C. 111](https://www.govinfo.gov/link/uscode/10/111)), headed by the Secretary of Defense.

**b) Plan text. Violations from cross-x and cards justifies positional competition, word PICs, and non-resolutional theory.**

**2. Counter-Interpretation:**

**Congress can reallocate authority and funding for SC broadly, especially for emerging tech operations with allies**

**Arabia ’21** [Christina; May 17; CRS Analyst in Security Assistance, Security Cooperation and the Global Arms Trade; Congressional Research Service, “Defense Primer: DOD “Title 10” Security Cooperation,” https://sgp.fas.org/crs/natsec/IF11677.pdf]

Congress plays critical roles in the design and oversight of SC programs and in ensuring that **SC activities are aligned with and meeting U.S. national security and foreign policy objectives**. Pursuant to statutory authorities, the executive branch must notify relevant committees on a regular basis about some, but not all, SC activities. Congress can exercise oversight roles in numerous ways, including determining how the executive branch makes decisions for the export of military and dual-use items, using annual authorizing legislation to establish temporary authorities or modify the U.S. Code on an enduring basis, reviewing proposed arms transfers and planned SC/SA activities and funding obligations, mandating reports, and holding relevant hearings. The Senate also influences SC through its advice and consent to the ratification of relevant treaties. DOD’s FY2021 SC Budget Request,

3. **Prefer it:**

**A. PRECISION---Arabia analyzes SA and SC broadly, while Mizokami is one example and has literally zero qualifications.**

**B. OVERLIMITING---Private contracts are normal means for the topic---they leave no room for aff innovation and delete most of the topic**

**DOD 21**, 10/22/21, “DoD Releases Report on Defense Spending by State in Fiscal Year 2020,” <https://oldcc.gov/dod-releases-report-defense-spending-state-fiscal-year-2020#:~:text=Of%20those%20funds%2C%20%24439.4%20billion,the%20salaries%20of%20DOD%20personnel>

Today, **the Department of Defense’s Office of Local Defense Community Cooperation** (formerly the Office of Economic Adjustment) **released its Fiscal Year 2020 Defense Spending** by State report to help states and communities better understand the components of defense spending on procurement and personnel. The report’s graphs, maps, and tables present a range of findings, such as total spending figures, categories of contracted goods and services, major defense vendors, and numbers and types of defense personnel. This snapshot provides public and private leaders with a starting place to assess how defense investments across installations and the private sector can be optimized by supporting regional innovation, industrial capability and capacity, supply chain resilience, and cultivating a skilled workforce.

**Defense spending rose in Fiscal Year 2020**. DoD contract obligations and payroll spending in the 50 states and the District of Columbia increased by $43 billion, or 8 percent, over the prior year. This was driven by a 9 percent increase in DoD contract obligations. Personnel spending in the 50 states and the District of Columbia increased by 5 percent.

DoD contract obligations and payroll spending in the 50 states and the District of Columbia totaled $593.9 billion, which is 2.8 percent of the country’s gross domestic product (GDP). If the total spending were divided across every U.S. resident, it would amount to $1,803 per U.S. citizen. **Of those funds, $439.4 billion (74 percent) were spent on contracts for products and services**, while the remaining $154.6 billion (26 percent) paid the salaries of DOD personnel.

Texas, Virginia, and California topped the list of recipients for overall defense spending. However, Virginia, Hawaii, and Connecticut ranked highest when considering defense spending’s impact on their states’ GDP.

**C. BURDEN MIXING---Obviates normal means in order to get a link to DOD trade-off**

**D. FUNCTIONAL LIMITS---‘say no’, Title 10 PICs, unilat CPs, politics check back.**

**E. Other words check---ensures stable neg ground.**

**T SC**

**Security cooperation includes information and resource sharing**

**CJCS 17**, Chairman of the Joint Chiefs of Staff, this publication provides joint doctrine for planning, executing, and assessing security cooperation activities, 5/23/17, “Security Cooperation,” https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3\_20\_20172305.pdf

**Security cooperation (SC)** encompasses all Department of Defense (DOD) interactions, programs, and activities with foreign security forces (FSF) and their institutions to build relationships that help promote US interests; enable partner nations (PNs) to provide the **US access to territory, infrastructure, information, and resources**; and/or to build and apply their capacity and capabilities consistent with US defense objectives. It includes, but is not limited to, military engagements with foreign defense and security establishments (including those governmental organizations that primarily perform disaster or emergency response functions), DOD-administered security assistance (SA) programs, combined exercises, international armaments cooperation, **and information sharing and collaboration**.

**Security cooperation includes resource pooling**

Jennifer **Moroney et al 11**, 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, Celeste Ward Gventer, PhD, is the President of the Defense Security Cooperation University (DSCU), a component of the Defense Security Cooperation Agency (DSCA) and the Department of Defense's Center of Excellence for Security Cooperation education, Stephanie has a Ph.D. in political science, Graduate Institute of International and Development Studies, Laurence Smallman, 2011, “Lessons from U.S. Allies in Security Cooperation with Third Countries,” *Rand*, https://www.rand.org/content/dam/rand/pubs/technical\_reports/2011/RAND\_TR972.pdf

Combining Resources The allies we surveyed all support the combining or **pooling of various resources for security cooperation** to some degree. These resource pools would be overseen by senior officials from defense and foreign affairs, as well as the development community in the case of the UK. USAF leaders should consider some potential **benefits of security cooperation resourcing pooling**, from the perspectives of both planning and economizing resources, particularly in the context of USAF-managed security cooperation resources. Resource pooling could help take some of the mystery out of the security cooperation budgeting process for the USAF, ensuring that program managers are not necessarily competing against one another for sustained or additional resources. The pooling approach would remove some authority from the program managers, which could be a positive move because coordination and deconfliction among programs have been challenging.

**T DSCA**

**Private contracts is normal means for the topic**

**DOD 21**, 10/22/21, “DoD Releases Report on Defense Spending by State in Fiscal Year 2020,” <https://oldcc.gov/dod-releases-report-defense-spending-state-fiscal-year-2020#:~:text=Of%20those%20funds%2C%20%24439.4%20billion,the%20salaries%20of%20DOD%20personnel>

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**NAVO works directly within the DOD**

**NAVOCEANO ND**, https://www.cnmoc.usff.navy.mil/navoceano/

**The Naval Oceanographic Office (NAVOCEANO**), the largest subordinate command within the Naval Meteorology and Oceanography Command, **is responsible for providing oceanographic products and services to all elements of the Department of Defense**. NAVOCEANO is located at John C. Stennis Space Center in south Mississippi.  
From data collection through production and analysis, NAVOCEANO provides the warfighter the best available knowledge of the maritime battlespace. This includes tailored oceanographic, hydrographic, bathymetric, geophysical and acoustic products and services that aid in safe navigation and effective mission planning.

**T AI**

**AI is powered by machine learning because fully autonomous AI doesn’t exist---their interp deletes a third of the topic**

Colin **Priest 21**, Colin Priest is the VP of AI Strategy for DataRobot, where he advises businesses on how to build business cases and successfully manage data science projects; he has held a number of CEO and general management roles, where he has championed data science initiatives in financial services, healthcare, security, oil and gas, government and marketing, 3/10/21, “Humans and AI: Should We Describe AI as Autonomous?” DataRobot, https://www.datarobot.com/blog/humans-and-ai-should-we-describe-ai-as-autonomous/

**The current generation of AI systems is powered by**[**machine learning**](https://www.datarobot.com/wiki/machine-learning/), a technology that involves learning by example rather than waiting for humans to manually code rules into a computer system. The process of creating and using the machine learning algorithm that powers your AI’s decisions requires a data scientist to:

Prepare relevant learning examples.

Set the goal to be achieved or optimized.

Fit pattern-matching algorithms.

Review the fitted patterns and outputs, iterating to ensure desired behavior.

Deploy the machine learning model into production.

Use [ML Ops tools](https://www.datarobot.com/platform/mlops/) and practices to define and monitor key performance indicators and manage system health.

To get from machine learning to an AI system, you need to broaden step four to convert machine learning predictions into decisions (for example, to offer product X to customer Y or to flag a transaction as fraudulent).

**At no point in this process does the AI system get to choose its own goals** or make decisions without human governance. The AI system is just a computer system, a tool to be used by humans. It is designed by humans, built by humans, managed by humans, with the objective to serve human goals. You don’t have to negotiate with an AI system to get it to do its job. AI systems are autonomous to the extent that they can make individual decisions without direct human interference in the moment, and, critically, without human capability to intercede, to interrupt, or to modify.

The dictionary definition of automated is “operated by largely automatic equipment.”

If we ignore the hype, **your AI system is automated, not autonomous**.

**AUV includes AI**

**UST 22**, Unmanned System Technology, 5/24/22, “Marine AI Software,” https://www.unmannedsystemstechnology.com/expo/marine-ai-software/

**AI** (artificial intelligence) software may be **installed on a variety of marine and maritime uncrewed systems** platforms, including USVs (uncrewed surface vessels), **AUVs** (autonomous underwater vehicles) and ROVs (remotely operated vehicles). These vehicles can use the power of AI software to intelligently analyze data from their sensors and learn how to respond to highly dynamic environments.

**AUVs may employ the use AI for autonomous navigation**. This is particularly important due to the fact that RF communications are largely unusable under water, AUVs may spend large amounts of time without access to GNSS signals or communications with their support vessel.

AUVs may also undertake missions such as minehunting, inspection and sea life identification with the help of computer vision and AI software.

**No AI is fully autonomous**

Dr. Wolfhart **Totschnig 20**, Dr. Totschnig is an assistant professor of philosophy at the Instituto de Humanidades of the Universidad Diego Portales in Santiago, Chile. He received a Masters degree in musicology and philosophy from the Universität Wien (Austria) and a PhD in philosophy from Northwestern University, 7/28/20, “Fully Autonomous AI,” *Science and Engineering Ethics*, *Springer*, pg. 2483, https://link.springer.com/content/pdf/10.1007/s11948-020-00243-z.pdf

At the beginning of Sect.  “One Decisive Objection to the Finality Argument”, I noted that the artificial agents currently in existence seem to corroborate the finality argument in that their goal or “utility function” is defined arbitrarily by their creators and not subject to change while they are operating. The finality argument’s proponents appear to take their bearings from this circumstance. When they envision a future human-equivalent or superhuman AI, they imagine it on the model of the machines of our day.25 They overlook that there is a big difference between today’s artificial agents and a human-equivalent AI: **Today’s systems are not general intelligences**. Their understanding of the world, or “world model,” is limited to a particular domain and remains fixed throughout their operation, which is why their (understanding of the) goal can remain fixed, too. A self-driving car, to return to this example, **has no capacity of learning** about things outside the domain of road traffic, so there is no chance that it could develop an understanding of the world whereby the goal of “driving safely and efciently from one place to another upon the user’s command” may shift in meaning or lose its validity. A general AI, by contrast, would have that capacity. It would develop a general understanding of normativity and consequently come to evaluate and, maybe, change the goal that it has been originally given.

**Machine learning mimics the human brain by learning**

Dr. Issam El **Naqa et al 15**, Dr. El Naqa is the founding chair of the department of Machine Learning at Moffitt Cancer Center, Tampa, Fl.  He is an internationally recognized authority in the fields of machine learning, data analytics, and oncology outcomes modeling and has published extensively in these areas with more than 220+ peer-reviewed journal publications and 4 edited textbooks; Ruijing Li is an associate professor at Stanford University of Radiation Oncology; Dr. Murphy is Founding Chairman and Chief Executive Officer of AlphaMed Consulting, Inc., that provides strategic support for cancer drug development programs of academic centers, global pharmaceutical and biotechnology companies; Published 2015, *Machine Learning in Radiation Oncology*, *Springer*, pg. IX, https://link.springer.com/content/pdf/10.1007/978-3-319-18305-3.pdf

**Machine learning is a technology that aims to develop computer algorithms that are able to emulate human intelligence** by incorporating ideas from neuroscience, probability and statistics, computer science, information theory, psychology, control theory, and philosophy with successful applications in computer vision, robotics, entertainment, ecology, biology, and medicine. The essence of this technology is to **humanize computers by learning from the surrounding environment** and previous experiences, with or without a teacher. The development and application of machine learning has undergone a significant surge in recent years due to the exponential growth and availability of “big data” with machine learning techniques occupying the driver’s seat to steer the understanding of such data in many fields, including radiation oncology.

**Machine learning and AI are the same or at least inextricably linked**

Gopinath **Rebala et al 19**, Gopinath Rebala is Chief Technical Officer at OpsMx, Dr. Ravi graduated with a medical degree from Armed Forces Medical College in 2003 and immigrated to the United States in 2004, He is board certified in Diagnostic Radiology and he holds the Subspecialty Certificate (CAQ) in Vascular and Interventional Radiology from the American Board of Radiology; Sanjay Churiwala is Senior Director of Engineering for Xilinx India Technology Services and he has extensive experience in the field of EDA and semiconductors R&D, as well as customer-interaction. He specializes in Clock Domain Crossings and Synchronization, STA, Power, Synthesis, Simulation, Rule based static checkers, Cell Characterization and Modeling, published 2019, *An Introduction to Machine Learning*, *Springer*, pg. V, https://link.springer.com/content/pdf/10.1007/978-3-030-15729-6.pdf

Machine learning (ML) is the new age electricity. When electricity was discovered, nobody had anticipated the far-reaching effect it would eventually have. Machine learning has the same potential. **Many people also consider machine learning (or artificial intelligence) as Industrial Revolution 4.0**. There is often an apprehension that ML will cause massive loss of jobs. Our belief is that ML will not cause loss of jobs. Just like advances in electricity and computerization brought in more jobs due to increased productivity, ML has potential to create different kinds of jobs. What is needed is to be future-ready for the shift in nature of jobs.

**Machine learning IS a part of AI BUT it is key to autonomy**

Gopinath **Rebala et al 19**, Gopinath Rebala is Chief Technical Officer at OpsMx, Dr. Ravi graduated with a medical degree from Armed Forces Medical College in 2003 and immigrated to the United States in 2004, He is board certified in Diagnostic Radiology and he holds the Subspecialty Certificate (CAQ) in Vascular and Interventional Radiology from the American Board of Radiology; Sanjay Churiwala is Senior Director of Engineering for Xilinx India Technology Services and he has extensive experience in the field of EDA and semiconductors R&D, as well as customer-interaction, *An Introduction to Machine Learning*, *Springer*, pg. 3, https://link.springer.com/content/pdf/10.1007/978-3-030-15729-6.pdf

**Artificial intelligence (AI) is a much broader field** of study than machine learning (ML). **AI is all about making machines intelligent** using multiple approaches, whereas **ML is essentially about one approach** – making **machines that can learn to perform tasks**. An example of an AI approach that’s not based on learning is developing expert systems. Although intelligence is hard to define, **it is clear that ML is a subfield of AI**. A vast majority of people believe that **AI and ML are the same due to a strong belief that ML is the only viable approach to achieving AI’s goals**. The field of AI has been around for over six decades, and it went through a few hype and bust cycles during this period. During the hype period, AI research would show a lot of promise; however, when the promise didn’t materialize, it was often followed by a bust cycle. During the bust cycles, the interest in AI waned (less funding for research, etc.). The last bust cycle was in the late 1980s and early 1990s. The AI bust cycles are popularly known as AI Winters. The current excitement in ML and AI is different from previous AI hype cycles, because unlike previous hype cycles, ML techniques are being deployed to solve real-world problems in daily lives.

**Machine learning is a foundational basis for autonomy and AI**

**Haddal et al 18**, [Haddal, Risa](https://inis.iaea.org/search/search.aspx?orig_q=author:%22Haddal,%20Risa%22) (Sandia National Laboratories (United States)); [Hayden, Nancy](https://inis.iaea.org/search/search.aspx?orig_q=author:%22Hayden,%20Nancy%22) (Sandia National Laboratories (United States)); [Frazar, Sarah](https://inis.iaea.org/search/search.aspx?orig_q=author:%22Frazar,%20Sarah%22) (Pacific Northwest National Laboratory (United States)), published 2018, *Autonomous Systems, Artificial Intelligence and Safeguards*, Department of Energy, pg. 1-2, https://www.osti.gov/servlets/purl/1561151

AI design and development includes small, individualized applications, such as smartphones, as well as the broad field of large-scale, federated systems capable of making intelligent decisions as a collective, such as that required for autonomous vehicles. Machine Learning **(ML) is a foundational basis for AI** that seeks to provide **knowledge to computers through data**, observations and interacting with the world, thereby allowing computers to correctly generalize to new settings [4]. Recent advancements in hardware that enable rapid, on-board processing of huge data sets have spurred the development of special architectures for ML algorithms, such as those required for Deep Neural Networks (DNN). These architectures are composed of multiple levels of non-linear operations, such as in neural networks with many hidden layers [4]. AI technologies provide the underlying capability for autonomous systems. **While autonomy is enabled by AI, not all uses of AI are autonomous**. For example, many AI capabilities are used to augment human decision making, **rather than replace it**. To be autonomous, a system must have the capability to independently compose and select among different courses of action to accomplish goals based on its knowledge and understanding of the world, itself, and the situation [5]. **An autonomous system must be capable of learning from previous experience and taking action based on what it has learned**. Autonomy is enabled by the integration of the same three fundamental capabilities: sense (observe and orient), decide, act, and communicate [6]. Unlike automation, which uses various control systems for operating equipment such as machinery, and whose functioning cannot accommodate ambiguity or adjust to uncertainties, autonomy includes a decision-making component that leverages computational intelligence and learning algorithms, or AI, to better adapt to unanticipated and changing situations [7]. Recent commercial advances in autonomy result from the convergence of technological breakthroughs in the fields of AI (such as facial recognition and deep neural networks) and computing hardware (such as graphical processing units (GPUs)), combined with the unprecedented availability of labelled data, to enable real-time or near real-time analysis and decision-making by human-machine systems.

**AT: Adv CP**

**2AC—AT: Drones**

**Drones fail**

**Bajema 7/16** - Dr. Natasha Bajema has held long-term assignments at the National Defense University, in the U.S. Office of the Secretary of Defense, and at the U.S. Department of Energy's National Nuclear Security Administration. She's currently Director of the Converging Risks Lab at the Council on Strategic Risks. (“WILL AI STEAL SUBMARINES’ STEALTH?,” IEEE Spectrum, 16 JUL 2022, <https://spectrum.ieee.org/nuclear-submarine)//mcu>

Gower considers underwater **drones to be “the least likely innovation to make a difference in the decline of submarine stealth.**” A navy would need a lot of drones, data rates are exceedingly slow, and a drone’s transmission range is short. Drones are also noisy and extremely easy to detect. “Not to mention that controlling thousands of underwater drones far exceeds current technological capabilities,” he adds. Gower says it could be possible “to use drones and sonar networks together in choke points to detect submarine patrols.” Among the strategically important submarine patrol choke points are the exit routes on either side of Ireland, for U.K. submarines; those around the islands of Hainan and Taiwan, for Chinese submarines; in the Barents or Kuril Island chain, for Russian submarines; and the Straits of Juan de Fuca, for U.S. Pacific submarines. On the other hand, he notes, “They could be monitored and removed since they would be close to sovereign territories. As such, the challenges would likely outweigh the gains.”

**2AC—AT: Satellites**

**Satellites fail**

**Bajema 7/16** - Dr. Natasha Bajema has held long-term assignments at the National Defense University, in the U.S. Office of the Secretary of Defense, and at the U.S. Department of Energy's National Nuclear Security Administration. She's currently Director of the Converging Risks Lab at the Council on Strategic Risks. (“WILL AI STEAL SUBMARINES’ STEALTH?,” IEEE Spectrum, 16 JUL 2022, <https://spectrum.ieee.org/nuclear-submarine)//mcu>

One day this trend will matter. But not just yet. Jeffrey Lewis, director of the East Asia Nonproliferation Program at the James Martin Center for Nonproliferation Studies, regularly uses satellite imagery in his work to track nuclear developments. But tracking submarines is a different matter. “Even though this is a commercially available technology, we still don’t see submarines in real time today,” Lewis says. The day when commercial satellite imagery reduces the stealth of submarines may well come, says Gower, but “we’re not there yet. **Even if you locate a submarine in real time, 10 minutes later, it’s very hard to find again**.”

**AT: CMBs CP**

Horowitz card admits might fail

The efficacy of any agreement would depend on the details, both in the agreement itself and in states’ execution. For example, the United States and China have signed multiple CBM agreements involving air and maritime deconfliction of military forces, including the 1998 U.S.-China Military Maritime Consultative Agreement and the 2014 Memorandum of Understanding Regarding the Rules of Behavior for Safety of Air and Maritime Encounters, yet U.S.-China air and naval incidents have continued.

**2AC—Say No**

**“NO.”- Russia**

**Sarotte 3/1** - Dr. Sarotte is a professor of historical studies at Johns Hopkins University and the author of “Not One Inch: America, Russia, and the Making of Post-Cold War Stalemate.” (Mary Elise Sarotte, “I’m a Cold War Historian. We’re in a Frightening New Era.” New York Times, 3/1/2022, <https://www.nytimes.com/2022/03/01/opinion/russia-ukraine-cold-war.html)//mcu>

Another problem is how quickly we have spun back up to Cold War-like hostility. During the old Cold War, which lasted from the late 1940s until around 1989, settled patterns of non-engagement had time to evolve. Those patterns did not disappear entirely in the 21st century; during the conflict in Syria, for example, Western powers made extensive efforts to deconflict with Russia. **But when the fighting is closer to home for Moscow, all bets are apparently off.** Last year a Russian Su-24 jet buzzed the U.S. Navy destroyer Donald Cook in the Black Sea, at one point passing as near as 100 yards. And last month, Russian Su-35 jets came close to American P-8A surveillance planes on three separate occasions. (One of the Russian aircraft passed within five feet of an American plane, according to U.S. officials.) Even if a similar close call does lead to a collision, it need not necessarily escalate to war. But Russia’s cavalier attitude becomes more dangerous in the context of its Ukrainian invasion and hostile intent. Picture this scenario: Many modern Western aircraft can detect an enemy aircraft acquiring a target. If they encounter a Russian pilot in acquisition mode — for instance, while flying in contested airspace over the Black Sea — they may conclude that they’ve become the target and act accordingly, leading to a potential incident with casualties. If treated as a violation of NATO’s Article 5 — which deems an attack on one NATO member as an attack on all — such contact and potential casualties could draw the alliance, and therefore the United States, into the conflict. Of course, the alliance could choose not to view the incident as a violation, or to pursue only a minimal response. But that could call NATO’s resolve into doubt, frightening frontline allies and emboldening Mr. Putin. The longevity of the Cold War also gave both sides time and incentive to negotiate arms control agreements. Washington and its allies concluded a host of detailed treaties with Moscow that, while flawed, at least provided predictability and monitoring — all while serving to build a long-term relationship in managing nuclear danger. In recent years, however, both sides rashly shed many of these accords, seeing them as outdated and **inconveniently constraining.** The New START Treaty is now the only restraint on the number and types of U.S. and Russian nuclear weapons — and it expires in 2026, with little hope of renewal. Already gone are the Anti-Ballistic Missile Treaty, which George W. Bush abrogated in 2002, and the Conventional Armed Forces in Europe Treaty, from which Mr. Putin “suspended” Russian participation in 2007. And, most relevant to today’s crisis, in 2019 President Donald Trump abrogated the Intermediate-Range Nuclear Forces Treaty over U.S. claims of Russian violations and Chinese arms buildup (though China was not a party to the treaty). Signed by President Ronald Reagan and the Soviet leader Mikhail Gorbachev in 1987, the Intermediate-Range Nuclear Forces Treaty eliminated that class of weapons entirely. Now that it is no more, Mr. Putin claims to fear that the alliance could deploy such weapons on Ukrainian territory against Russian targets. He has cited that possibility, along with denying that Ukraine is a separate country, among his motivations for invading Ukraine. **Even if Moscow can be brought back to the negotiating table, which seems highly unlikely for the foreseeable future**, it would take years of painstaking talks to resurrect these treaties. Their disappearance is especially grievous in light of other losses — of military-to-military communication, expelled embassy and consulate staff members — and the development of new forms of weapons, such as hypersonic missiles and cyberwarfare. Two of the world’s largest military powers are now functioning in near-total isolation from each other, which is a danger to everyone.

**1AR—Say no**

**Talks are pointless**

**Reuters 6/20** (“Russia's Medvedev suggests U.S. should beg for nuclear arms talks,” Reuters, 6/20/2022, <https://www.reuters.com/world/europe/russia-should-not-negotiate-with-us-nuclear-issues-yet-ex-president-says-2022-06-20/)//mcu>

June 20 (Reuters) - Former Russian President Dmitry Medvedev said on Monday **that there was no point having any nuclear arms reduction talks with the United States and that Moscow** should wait until the Americans begged for negotiations. Russia and the United States, by far the world's biggest nuclear powers, have negotiated a series of major strategic nuclear arms reduction treaties since Ronald Reagan came to power in 1981. But Russia's invasion of Ukraine has triggered the most serious disruption in relations between Russia and the West since the 1962 Cuban Missile Crisis, when many people feared the world was on the brink of nuclear war. Medvedev, while president from 2008-2012, signed New START (Strategic Arms Reduction Treaty) in 2010 with Barack Obama in Prague which was extended in February 2021 for five years until 2026. Advertisement · Scroll to continue Report an ad "Now everything is a dead zone. **We don't have any relations with the United States now**. They are at zero on the Kelvin scale," Medvedev said on Telegram of discussions about a new strategic nuclear arms reduction treaty. "There is no need to negotiate with them (on nuclear disarmament) yet. This is bad for Russia," said Medvedev, who currently serves as deputy chairman of the Russian Security Council. "Let them run or crawl back themselves and ask for it." Advertisement · Scroll to continue Report an ad Russia and the United States control about 90% of the world's nuclear warheads, with around 4,000 warheads each in their military stockpiles, according to the Federation of American Scientists. Medvedev, who when president sought to present himself as a reformer who wanted better relations with the West, suggested that Moscow should get tougher with the United States.

**Relations are gutted now**

**Carafano 6/17** - a leading expert in national security and foreign policy challenges.(James Jay Carafano, “America and Russia Are in a New Kind of War,” Heritage Foundation, Jun 17th, 2022 https://www.heritage.org/defense/commentary/america-and-russia-are-new-kind-war)//mcu

The war against Ukraine has brought U.S.-Russian relations to their lowest point in modern history. Russia is demonstrating that it has no regard for human rights, nations’ sovereignty and territorial integrity, or nations’ right to determine their own future. Russian President Vladimir Putin clearly has imperialist ambitions. Ukraine did not provoke the war, and Putin likely would prefer to convert Ukraine into Russian territory once again. This is not another Cold War. There is nothing “cold” about naked, violent aggression. This is a new kind of war and the U.S. and its friends allies in the transatlantic community are going to learn how to fight. For starters, the transatlantic community needs to checkmate Putin’s two most important weapons—his military and Russia’s use of energy to blackmail, coerce, and profit.

**There is no political will**

**Bidgood 3/15** - director of the Eurasia Nonproliferation Program at Middlebury’s Center for Nonproliferation Studies. (Sarah Bidgood, “A New Nuclear Arms Race Is a Real Possibility,” Foreign Policy, 3/15/2022, https://foreignpolicy.com/2022/03/15/nuclear-arms-control-race-russia-ukraine-america/)//mcu

The good news is that, as was true 60 years ago, the deliberate, persistent, and personal advocacy of leaders in both Washington and Moscow can go a long way toward overcoming these barriers. Without a clear sense for how this conflict ends, however, it is hard to say whether or when there will be political will for this kind of work on either side. What is certain is that Putin’s recent actions do not align with last year’s U.S.-Russia Presidential Joint Statement, which affirmed that, “even in periods of tension, [the United States and Russia] are able to make progress on our shared goals of ensuring predictability in the strategic sphere, reducing the risk of armed conflicts and the threat of nuclear war.” It remains to be seen whether the two sides will be able to meet this relatively low bar in the future.

**Talk inevitably fail**

**Gottemoeller 20** - nonresident senior fellow in Carnegie’s Nuclear Policy Program. She also serves as the Frank E. and Arthur W. Payne Distinguished Lecturer at Stanford University’s Freeman Spogli Institute for International Studies and is a research fellow at the Hoover Institution. (ROSE GOTTEMOELLER, “Russia Is Updating Their Nuclear Weapons: What Does That Mean for the Rest of Us?” Carnegie Endowment for International Peace, 1/29/2020, <https://carnegieendowment.org/2020/01/29/russia-is-updating-their-nuclear-weapons-what-does-that-mean-for-rest-of-us-pub-80895)//mcu>

We should be concerned, however, that they may revert to the talk shops of the Cold War, with few opportunities to work together on practical projects. Meanwhile, pragmatic and persistent tools, such as the Nuclear Risk Reduction Centers (NRRCs) that operate in the U.S. Department of State and the Russian Ministry of Defense, may find their missions sharply curtailed as they cease to serve any treaty purpose. **The United States, Russia, and Europe may thus be heading to a time when their means of communications in a nuclear crisis is no better than they had during the Cold War**.

**2AC—Fails for Subs**

**Fails for subs specifically + no trust**

**Horowitz and Scharre 21** – Horowitz Adjunct Senior Fellow in the Technology and National Security Program at the Center for a New American; won the 2017 Karl Deutsch Award given by the International Studies Association for early career contributions to the fields of international relations and peace research; research interests include the intersection of emerging technologies such as artificial intelligence (AI) and robotics with global politics, military innovation, the role of leaders in international politics, and geopolitical forecasting methodology; worked for Department of Defense and is a member of the Council on Foreign Relations. received his PhD in government from Harvard University and his BA in political science from Emory University. Scharre a Senior Fellow and Director at CNAS; worked in the Office of the Secretary of Defense establishing policies on autonomous systems and emerging weapons technologies; holds a PhD in war studies from King’s College London and an MA in political economy and public policy and a BS in physics (Michael Horowitz and Paul Scharre, “AI and International Stability: Risks and Confidence-Building Measures” Center for New American Security, January 2021, <https://www.cnas.org/publications/reports/ai-and-international-stability-risks-and-confidence-building-measures)//mcu>

One challenge to establishing rules of the road for autonomous systems’ behavior would be if there were incentives to defect from the rules. For example, in World War I, technological developments enabled submarines, which were highly effective in attacking ships but unable to feasibly comply with existing prize law without putting themselves at risk of attack by surfacing. **Despite attempts** in the early 20th century **to regulate submarines, the incentives for defecting from the existing rules were too great (and the rules failed to adapt), and the result was unrestricted submarine warfare**.68 Another challenge to a potential autonomous incidents agreement is fully exploring the incentives for **trustworthiness**, both in the signals that countries send about the behavior of their autonomous systems and adversaries’ responses. Some declaratory policies would not be credible, such as the claim to have created a “dead hand” system such that if a country engaged in a particular type of action, an autonomous system would start a war and there would be nothing a leader could do to stop it.

**Any risk the CP goes south stunts any hope for future negotiations**

**Horowitz and Scharre 21** – Horowitz Adjunct Senior Fellow in the Technology and National Security Program at the Center for a New American; won the 2017 Karl Deutsch Award given by the International Studies Association for early career contributions to the fields of international relations and peace research; research interests include the intersection of emerging technologies such as artificial intelligence (AI) and robotics with global politics, military innovation, the role of leaders in international politics, and geopolitical forecasting methodology; worked for Department of Defense and is a member of the Council on Foreign Relations. received his PhD in government from Harvard University and his BA in political science from Emory University. Scharre a Senior Fellow and Director at CNAS; worked in the Office of the Secretary of Defense establishing policies on autonomous systems and emerging weapons technologies; holds a PhD in war studies from King’s College London and an MA in political economy and public policy and a BS in physics (Michael Horowitz and Paul Scharre, “AI and International Stability: Risks and Confidence-Building Measures” Center for New American Security, January 2021, <https://www.cnas.org/publications/reports/ai-and-international-stability-risks-and-confidence-building-measures)//mcu>

There are a few potential drawbacks to a broad code of conduct. First, a broader code of conduct, lacking the specificity of some of the measures discussed above, might undercut momentum toward broader cooperation, rather than serve as a building block. Second, there would be risk in negotiating a code of conduct that disagreements over some of the specifics could derail the entire endeavor or lead to forum shopping, whereby countries then spin off to create their own dialogues about a code of conduct. This is arguably what **has happened in the cyber realm**, where several different ongoing dialogue processes about codes of conduct have not led to substantive success. Third, a more formal code of conduct might start to raise the prospects of triggering some of the costs associated with CBMs. Specifically, if a country reduced its investments in military applications of AI or did not pursue capability areas because it believed adversaries were following a code of conduct, it could **expose itself** in the event of cheating. This might be of particular concern for democracies, given that, in many cases, democracies are more likely to comply with the agreements they sign, in part because democracies often have rigorous internal bureaucratic processes to ensure compliance.56 Thus, one might imagine that the incentives might lead to a less formal code of conduct designed as a building block, rather than something that might cause countries to restrain capabilities.

**History proves**

After the invention of nuclear weapons, concerns surrounding their potential use dominated the attention of policymakers given the weapons’ sheer destructive potential. Especially after the Cuban Missile Crisis illustrated the very real risk of escalation, the United States and the Soviet Union engaged in arms control on a range of weapons technologies, including strategic missile defense, intermediate-range missiles, space-based weapons of mass destruction (WMDs), biological weapons, and apparent tacit restraint in neutron bombs and anti-satellite weapons. The United States and the Soviet Union also, at times, cooperated to avoid miscalculation and improve stability through measures such as the Open Skies Treaty and the 1972 Incidents at Sea Agreement.

**AT: Code of Conduct**

**Undermines future negotiations or ineffective to actually restrain**

There are a few potential drawbacks to a broad code of conduct. First, a broader code of conduct, lacking the specificity of some of the measures discussed above, might undercut momentum toward broader cooperation, rather than serve as a building block. Second, there would be risk in negotiating a code of conduct that disagreements over some of the specifics could derail the entire endeavor or lead to forum shopping, whereby countries then spin off to create their own dialogues about a code of conduct. This is arguably what **has happened in the cyber realm**, where several different ongoing dialogue processes about codes of conduct have not led to substantive success. Third, a more formal code of conduct might start to raise the prospects of triggering some of the costs associated with CBMs. Specifically, if a country reduced its investments in military applications of AI or did not pursue capability areas because it believed adversaries were following a code of conduct, it could **expose itself** in the event of cheating. This might be of particular concern for democracies, given that, in many cases, democracies are more likely to comply with the agreements they sign, in part because democracies often have rigorous internal bureaucratic processes to ensure compliance.56 Thus, one might imagine that the incentives might lead to a less formal code of conduct designed as a building block, rather than something that might cause countries to restrain capabilities.

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**OSCE CP**

**2AC – A2: OSCE CP**

**Multiple problems with the OSCE – none of which the CP solves.**

**Kanevskiy 19** [Pavel Kanevskiy is an associate professor of political science and vice dean at the Lomonosov Moscow State University (MSU) Faculty of Sociology. Pavel Kanevskiy is a member and chair of the Younger Generation Leaders Network on Euro-Atlantic Security (YGLN), 12-9-2019, Age of mistrust: crisis of co-operative security in Europe, Heinrich-Böll-Stiftung, https://www.boell.de/en/2019/12/09/age-mistrust-crisis-co-operative-security-europe] Eric

One of the major long-term challenges for the **OSCE** is her **lack** of **adequate resources.** Since the economic crisis of 2008-09, the OSCE’s budget **has been gradually declining**. The Organization’s approved annual budget for 2018 was only [137.8 million euros](https://www.osce.org/annual-report/2018), which is very low for the world’s largest regional security organization with 16 field presences across the Euro-Atlantic and Eurasian space. This decline has been partially compensated by extra-budgetary funding through voluntary contributions, which in 2018 reached [40.9 million](https://www.osce.org/annual-report/2018). But even with factoring in this uncertain source of income, the OSCE’s overall financial resources hardly match those of most UN peacekeeping operations. For instance, the annual budget of the United Nations Mission in South Sudan alone is [over 1 billion U.S. dollars](https://undocs.org/en/A/C.5/72/25).

Many **insiders** agree that the OSCE is a relatively effective and efficient organization, especially when compared to other multilateral institutions. Yet, some of the OSCE participating States have been pursuing the “**zero nominal growth**” policy that has been **pushing** the **Organization to its limits for several years**. If this trend is not reversed, the OSCE slowly but certainly risks losing its operational capabilities, credibility and, in the long term, **relevance**.

Another major challenge relates to the lack of formally recognized legal status. Although the OSCE participating States agreed already in 1993 that the Organization should be granted full legal personality similar to the United Nations and their bodies, there has been **little** **progress** in this regard **over the past 25 years**. In 2007, a draft convention on legal personality and privileges and immunities was for the OSCE was agreed by an expert group but has not been adopted so far.

While this may seem like a theoretical problem, it has very concrete practical consequences, especially in a crisis situation. For instance, the first monitors in Ukraine had to be deployed **without appropriate privileges, immunities, and security guarantees from** the host country, and the Mission’s operations were hampered as they were not able to open bank accounts, enter into contracts, and import much-needed equipment. These obstacles were removed only after several weeks when a memorandum of understanding with the host authorities was concluded.

The **decentralized nature** of the Organization also poses challenges for an effective functioning of the OSCE, its visibility and profile. Compared to other international organizations, the mandate of the OSCE Secretary General is relatively restrictive. The Secretary General functions mainly as a Chief Administrative Officer but a high degree of autonomy in both political and financial matters enjoyed by the Organization’s executive structures, namely its 16 field operations and 3 autonomous institutions is hampering this role. For instance, **the heads of the OSCE** field operations **manage their own budgets**, are selected and appointed by the OSCE Chairmanship, and report back to the OSCE Permanent Council. Also, the Secretary General’s political role is very limited. The main responsibility for political guidance lies with the Chairmanship that rotates on an annual basis. Even in a crisis situation, the Secretary General’s powers are very limited; although he/she is mandated to bring to the participating States’ attention any situation of emerging tension or conflict, there are no instruments for early action at his/her disposal, such as dispatching a small fact-finding monitoring or mediation team.

Last but not least, the current form of **decision-making** within the OSCE **based on consensus rule** **hinders any meaningful progress**. The problem with the consensus rule is not its existence but the fact that it **has been interpreted in** **absolute terms** **for many years.** The consensus rule is crucial for inclusiveness and legitimacy of decisions in a political body such as the OSCE. However, if it is taken too literally and applied to all areas, including, for instance, procedural issues such as adopting the agendas of most meetings, it leads to micromanagement and hinders the Organization’s work. It also **allows any participating** **State to hold the Organization** “**hostage**” **to its immediate political interests** and agenda, which has been clearly visible in the budget negotiations over recent years.

**1AR – A2: OSCE CP**

**Russia has destroyed the credibility of the OSCE**

**GüNther 22** [Mirco Günther heads the FES Regional Office for Asia, based in Singapore. Previously, he was FES Country Representative in Afghanistan. In 2014, he helped establish the OSCE Observer Mission in Eastern Ukraine and also worked for the organisation in Kazakhstan and Tajikistan, 02-15-2022, We have an institution to ensure peace in Europe, No Publication, https://www.ips-journal.eu/topics/foreign-and-security-policy/we-have-an-institution-to-ensure-peace-in-europe-5716/] Eric

Many actors bear responsibility for the **OSCE’s sorry** **state**. Moscow, for example, **has repeatedly weakened** OSCE mandates and operational capabilities, while at the same time **lamenting the Organization’s lacking relevance.** Countries like Armenia and Azerbaijan often **obstruct even the** **simplest decisions** on procedural matters, following a logic of national rivalry. Various host countries have limited the mandates of OSCE field operations, although it needs to be recognised that this is their sovereign right. Western countries, too, **have sold the OSCE short, preferring other organisations** or bilateral formats. Moreover, many states continue to prioritise austerity policies and fail **to give the Organization the** financial **resources** it needs.

**Structural problems destroy diplomatic and persuasive crediblity**

**GüNther 22** [Mirco Günther heads the FES Regional Office for Asia, based in Singapore. Previously, he was FES Country Representative in Afghanistan. In 2014, he helped establish the OSCE Observer Mission in Eastern Ukraine and also worked for the organisation in Kazakhstan and Tajikistan, 02-15-2022, We have an institution to ensure peace in Europe, No Publication, https://www.ips-journal.eu/topics/foreign-and-security-policy/we-have-an-institution-to-ensure-peace-in-europe-5716/] Eric

Sadly, such **diplomatic success stories** are rare. The OSCE **is mired in permanent crisis**, verging on paralysis. The Swedish chairmanship in 2021 ended with few substantive achievements. The OSCE-hosted Human Dimension Implementation Meeting, Europe’s largest human rights conference, **was blocked by Russia.** Election monitoring missions **are regularly disputed.** Agreements are reached only **with great difficulty,** if at all, even on largely operational matters, such as the annual budget or the agenda for the annual security conference. In 2020, the Organization stared into the abyss when, in **an unprecedented leadership crisis,** **its four most important posts lay vacant** for several months, including that of secretary general.

**Turkey PIC**

**1AR – Deficit – Advantage 1**

**Turkey ASW Capabilities are crucial for effective deterrence in the Russia-NATo balance.**

**Ozberk 22** [Tayfun Ozberk is a former naval officer who is expert in Above Water Warfare especially in Littoral Waters. He has a Bachelor Degree in Computer Science. After serving the Turkish Navy for 16 years, he started writing articles for several media, 1-23-2022, Analysis: Why do Turkey’s upcoming Reis-class submarines have potential to affect balances in the region?, Naval News, https://www.navalnews.com/naval-news/2022/01/analysis-why-do-turkeys-upcoming-reis-class-submarines-have-potential-to-affect-balances-in-the-region/] Eric

**Turkey** meets AIP technology with **Reis-class project**

The Turkish Navy will have AIP technology based on the proven Howaldswerke-Deutsche Werft (HDW) fuel cell with the Reis-class submarines. The AIP system employs fuel cell technology, including a PEM Fuel Cell (2x120kw) and high capacity batteries (232 units), allowing the submarine to sustain long-endurance deployments without snorkeling.

The Turkish Navy will receive **six** Type 214 TN AIP **submarines as part of this program**. [On March 23, 2021, the Golcuk Naval Shipyard floated out the leading boat of the project, TCG Piri Reis,](https://www.navalnews.com/naval-news/2021/03/turkey-floats-out-its-first-aip-submarine-piri-reis/) which is scheduled to enter service in 2022. For the next five years, the remaining boats will be built and commissioned. The Reis class submarines will be capable to deploy heavyweight torpedoes (DM2A4, indigenous AKYA, and MK48 Mod 6AT), anti-ship missiles (Sub-Harpoon, maybe indigenous ATMACA in after the first sub), and mines.

Reis-class submarines & Regional Balances

While naval forces are not the only instruments for regional balance, **they should be regarded as key actors** due to their roles of “supporting government policies” in peacetime and striking capabilities during conflicts. As a result, the countries **conduct comprehensive naval modernization** **and acquisition programs** in accordance with their economic situation and infrastructure.

Submarines, whose strategic importance has already been highlighted, **have a direct impact on the countrys’ A2/AD capabilities.** As a result, the quantity, types, capabilities, and weapon power of the submarine fleet **affect regional balances**. Because, the increased number of submarines allows for greater control over larger maritime areas while remaining undetected, and because these submarines may remain underwater for extended periods of time, causing the fleets of other countries to face increased uncertainty.

One important example of this issue is Greece’s Foreign Minister [Nikos Dendias’ repeated warnings to Germany](https://www.ekathimerini.com/news/258951/dendias-urges-berlin-to-halt-sale-of-submarines-to-ankara/) to block the sale of Type 214 class submarines to Turkey. He repeatedly stated that acquiring these submarines will tip the regional balance in Turkey’s favor.

Russia, Greece, Israel, and Egypt have the most significant fleets in Turkey’s neighboring seas. Only Greece and Israel have AIP-capable submarines among these states. Greece currently operates four Type 214 AIP submarines and one Type 209 AIP upgraded submarine. Israel operates two [Dolphin-II](https://www.navalnews.com/naval-news/2022/01/israels-submarine-secret-new-dolphin-class-boat-could-have-vls/) class AIP submarines, one Dolphin-II submarine is currently under construction, and has recently ordered three [Dakar-class submarines](https://www.navalnews.com/naval-news/2022/01/israel-orders-3-new-dakar-class-submarines-from-tkms/) from TKMS.

Turkey, which will have six AIP-capable Reis-class submarines after 2027, will have the most AIP submarines in the region with Israel (although the schedule of Dakar class submarines is not yet known), compared to Greece’s five. In addition, Turkey aims to commission 4-6 national submarines (MILDEN), which will be AIP capable and possibly armed with indigenous GEZGIN strategic missiles. In the second half of the 2030s, the delicate balance of the region is likely to change in favor of Turkey in terms of AIP submarines. (MILDENs will replace Turkey’s aging Type 209/1200 (AY class) submarines.)

Black Sea

Following the invasion of Crimea, Russia strengthened the Black Sea Fleet at the Sevastopol Naval Base to preserve a strategic balance against NATO expansion into Eastern Europe and the wider Black Sea region. According to open-source statements, the Russian Black Sea Fleet’s warships increased from 34 to 49, while submarines increased from 1 to 7.

The Russian Black Sea force operates improved Kilo-class submarines that can launch Kalibr land-attack missiles but are not AIP-capable.

**The Reis-class submarine’s commissioning is likely to have an impact on the Black Sea balance as well.** The Turkish Navy currently has 12 diesel-electric submarines, and after the Reis-class is operational, the total number of submarines will be 18 (6 AIP + 12 non-AIP). This submarine force would be capable to penetrate Russia’s strong A2/AD in the Black Sea.

According to the Montreux Convention, which governs the straits’ transit regime as well as regulating the tonnage and types of naval assets deployed in the Black Sea by non-Black Sea states, the non-Black Sea countries are not permitted to deploy submarines in the region. As a result, as a NATO ally, Turkey’s submarine fleet is **the only asset capable of countering** the **Russian Navy’s ambitions** on behalf of NATO. Thus, the Reis-class submarine project **could be considered as a factor to affect NATO-Russia balance in the Black Sea.**

**1AR – Deficit – Advantage 2**

**Black sea country minesweepers are key – Turkey is “most prepared.”**

**Kablan 22** [Omer Kablan is a writer for TRT World, 04-07-2022, Türkiye detects and neutralises stray mines in the Black Sea, Türkiye detects and neutralises stray mines in the Black Sea, https://www.trtworld.com/turkey/t%C3%BCrkiye-detects-and-neutralises-stray-mines-in-the-black-sea-56154] Eric

Türkiye has **found and safely disposed of a sea mine** off the Black Sea coast, the National Defense Ministry said.

The area was secured immediately after the mine was spotted by patrol aircraft off Kocaeli, and underwater explosive ordnance disposal units successfully neutralised it, the ministry tweeted on Wednesday.

This is the third sea mine discovered by Turkish authorities since the beginning of the Ukraine-Russia conflict, with the first detected off the northern coast of Igneada near the Bulgarian maritime border and the second spotted at the entrance to the Bosporus in March.

Where are they from?

Several hundred mines have drifted into the Black Sea after breaking off from cables near Ukrainian ports, according to Russia's main intelligence agency.

"Due to storm weather, the cables connecting the mines to anchors were broken," Russia's Federal Security Service (FSB) said in a press release dated March 19. "Due to wind and water currents, the mines are drifting freely in the western part of the Black Sea."

Viktor Vyshnov, deputy head of Ukraine’s state-run Maritime Administration, said "This is complete disinformation from the Russian side," adding, "This was done to justify the closure of these districts of the Black Sea under so-called 'danger of mines.'"

The Ukrainian navy said it alone had the right to distribute safety notices about its part of the Black Sea and cast Moscow's warning as an attempt at information "piracy."

Ukraine's foreign ministry said that Russia was planting naval mines in the Black Sea as "uncontrolled drifting ammunition," turning them "into a de facto weapon of indiscriminate action."

Some observers have said the mines drifted from a Ukrainian sea blockade, but that has not been verified.

420 naval mines

The FSB said around 420 mines had broken loose, claiming that the mines were set by Ukrainian forces.

Russian reports said that these mines were made during the Soviet era in the first half of the 20th Century, adding that Ukraine planted these mines at the beginning of the ongoing conflict in Ukraine. The types of mines are “YM” weighing 17kg and “YRM” weighing 30kg, both can be placed one or two metres below the surface of the sea. The mine can explode once it is touched.

Experts urged that **all Black Sea countries** should cooperate in the search operation to **detect all drifting mines** which could threaten international navigation.

The Samsun NAVTEX station of the Turkish Naval Forces’ office of navigation issued a statement on March 21 warning ships in the Black Sea against the mines.

The station requested that ships in the vicinity immediately report any detection of drifted mines or mine-like objects to the Turkish main search and rescue coordination centre and the Turkish Naval Forces.

Detecting stray mines

**Türkiye** is one of the countries among NATO members **most prepared for such mines; its naval army has 11 minesweepers always ready to act**. However, naval teams may face difficulty in detecting these mines due to weather conditions.

Defense Minister Hulusi Akar earlier said that minehunter vessels, along with maritime patrol aircraft, are constantly monitoring waterways near the Turkish coasts in the Black Sea region to detect and neutralise drifting mines.

Akar also said both the Russian and Ukrainian sides had been notified and that coordination is ongoing.

The Black Sea is a major shipping route for grain, oil and oil products. It links to the Marmara and the Mediterranean seas via the Bosphorus strait, which runs through the heart of Istanbul, Türkiye’s largest city with 16 million residents.

Bottom of Form

**EU CP**

**2AC – Deficit**

**EU Army is ineffective – Ukraine proves – multiple reasons.**

**Vicente 22** [AdéRito Vicente is a PhD researcher in the Department of Political and Social Sciences at the European university Institute, 2-24-2022, Why Europe slept? The failure to prevent the war in Ukraine, European Leadership Network, https://www.europeanleadershipnetwork.org/commentary/why-europe-slept-the-failure-to-prevent-the-war-in-ukraine/] Eric

First and foremost, due to security idiosyncrasies. Europe **is not a collective security guarantor**. It dismissed this opportunity in 1954 when France [refused](https://www.cvce.eu/en/education/unit-content/-/unit/1c8aa583-8ec5-41c4-9ad8-73674ea7f4a7/bd191c42-0f53-4ec0-a60a-c53c72c747c2) to establish a [European Defence Community (EDC)](https://aei.pitt.edu/5201/1/5201.pdf). Thus, despite [continuous efforts](https://www.e-ir.info/2016/05/12/a-comparative-historical-study-of-the-development-of-a-european-army/) ever since, Europe does not have an army nor a deterrent capability. It is, in fact, **highly dependent on NATO** and individual nuclear powers (predominantly the US and, to a lesser extent, the UK and France) to guarantee its collective security.

However, the Russo-Ukrainian war displays the Euro-Atlantic community’s [inability](https://www.foreignaffairs.com/articles/russia-fsu/2022-04-08/was-ukraine-wrong-give-its-nukes) to maintain [security assurances](https://www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/5442-negative-security-assurances) previously given to Kyiv under the [1994 Budapest Memorandum](https://treaties.un.org/doc/Publication/UNTS/Volume%203007/Part/volume-3007-I-52241.pdf). In this political agreement, the US, the UK and Russia pledged not to use military force against Ukraine in exchange for it renouncing the nuclear weapons it had [inherited](https://www.press.jhu.edu/books/title/12715/inheriting-bomb) from the Soviet Union. Russia violated this agreement at least twice – with the 2014 annexation of Crimea and the 2022 invasion of Ukraine – and the Euro-Atlantic guarantor countries failed to protect Ukraine.

However, the Memorandum’s greatest weakness lay in the fact **that it was only politically**, and not **legally, binding**. This is why Ukrainian President Volodymyr Zelenskyy [demands](https://www.president.gov.ua/en/news/dlya-ukrayinskoyi-derzhavi-pitannya-bezpeki-maye-buti-na-per-74113) **legally binding**[**security guarantees**](https://www.shrmonitor.org/what-security-guarantees/) instead of the Memorandum’s politically binding security assurances.

As a non-nuclear weapon state, which is not protected under a security guarantee by a nuclear weapon state or a nuclear alliance such as NATO, Ukraine was exposed to aggression or intended regime change carried out by an [NPT](https://www.un.org/disarmament/wmd/nuclear/npt/text/)-recognised nuclear weapon state. Hence, Europe and NATO could not have provided a [nuclear umbrella](https://www.collinsdictionary.com/dictionary/english/nuclear-umbrella) to a non-allied state such as Ukraine. Without security guarantees or NATO’s [extended nuclear deterrence](https://www.doctrine.af.mil/Portals/61/documents/AFDP_3-72/3-72-D12-NUKE-OPS-Extended-Deterrence.pdf), Ukraine was on its own in its direct confrontation against Russia.

Given the inability of major nuclear powers to uphold the Budapest Memorandum and the difficulty of enforcing [credible](https://academic.oup.com/ia/article-abstract/91/3/505/2326836?redirectedFrom=fulltext&login=false) security assurances due to Moscow’s actions, Ukraine [proposed](https://kyivindependent.com/national/ukraine-seeks-security-guarantees-stronger-than-natos-outlines-other-terms-for-peace-deal-with-russia/), on 29thMarch, security guarantees in which guarantor countries (such as the P5) must consult each other within three days after the beginning of military aggression or hybrid war. Within this scheme, after consultations, this group of countries must provide aid to Kyiv by sending troops, supplying weapons, and protecting Ukraine’s airspace. Ultimately, this proposal would exclude security guarantees potentially given by NATO or the EU and would ‘deresponsibilize’ Europe as a collective security guarantor of Ukraine.

The second reason Europe failed to prevent Putin’s war in Ukraine **is because of nuclear policy choices**. The EU is basically **a non-proliferation actor** (not a [nuclear deterrent](https://www.europeanleadershipnetwork.org/commentary/euro-nukes-a-difficult-but-perhaps-necessary-debate/) one) **who supports the NPT** as the cornerstone of the global nuclear disarmament and non-proliferation regime. Since Ukraine’s independence in 1991, the EU has shown that its interests lie primarily in the physical protection of nuclear facilities and materials of the former Soviet states, leading to the establishment of [TACIS](https://cordis.europa.eu/article/id/4390-what-is-tacis). Indeed, Brussels proved to be more concerned about the energy aspects of [nuclear security](https://www.sipri.org/sites/default/files/Implications-Ukraine-conflict-national-nuclear-security-policy.pdf), generated mainly by the outcome of the 1986 Chernobyl disaster, than with the territorial integrity and sovereignty of Ukraine.

It was only in the aftermath of Moscow’s invasion of Crimea and Donbass in 2014 that the EU’s Russia policy took Ukraine’s security seriously into account. But Brussels did not provide nuclear deterrent capabilities against Russia for the reasons stated above and, most importantly, as it is a de facto NPT regime guarantor.

The EU is critical of the view that more nuclear weapons can induce stability and decrease the chances of crisis escalation (nuclear stability theory), prominently [defended](https://www.tandfonline.com/doi/abs/10.1080/05679328108457394) by neo-realist Kenneth Waltz. As an NPT regime guarantor, Brussels supports the idea that nuclear proliferation is potentially the greatest threat to international and European security, requiring a concerted and multilateral response. For example, the [2003 EU Strategy against Proliferation of WMD](https://data.consilium.europa.eu/doc/document/ST-15708-2003-INIT/en/pdf) stated that the spread of nuclear weapons to additional states not only increases the likelihood of interstate nuclear conflict but increases the chances of nuclear material falling into the hands of violent non-state groups who are free from the threat of nuclear retaliation.

Therefore, the EU has been more politically engaged in ensuring Kyiv would not obtain nuclear weapons (mentioned, for example, in Article 11 of the [EU-Ukraine Association Agreement](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22014A0529(01)&from=EN)) than in providing Ukraine with some kind of ‘security (nuclear) umbrella’.

The third reason is **due to divergent political interests** among EU member states.Since March 2014, the EU has adopted a strict non-recognition policy regarding Russia’s illegal annexation of Crimea. This policy led to substantive [sanctions](https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/) against Russia and prompted the EU to agree on [five guiding principles](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/614698/EPRS_BRI(2018)614698_EN.pdf) to punish Russia’s aggression against Ukraine. However, these actions did not deter Moscow in Ukraine nor prevent the EU from negotiating trade and energy deals with Russia. **A lack of coherence** among EU members affected the effective implementation of the guiding principles and restrictive measures due to different **political** interests and **positions** **towards Russia** conditioned by threat perceptions, economic interests,and energy dependence.

Before the 2022 Russian invasion of Ukraine, four key threat perception conclusions emerged: 1) a state geographically close to an adverse nuclear power increases threat perception (e.g. Finland and Sweden); 2) a state geographically far from an adverse nuclear power decreases threat perception (e.g. Portugal and Spain); 3) a shared history of conflict increases threat perception (e.g. the Baltic States and Poland); 4) a non-shared history of conflict decreases threat perception (e.g. Italy). In sum, the different degrees of [threat perception](https://www.rand.org/content/dam/rand/pubs/research_reports/RR1500/RR1579/RAND_RR1579.pdf) of each European state towards Russia undermined the idea of European solidarity and cohesion and, ultimately, the effectiveness of the EU as a political player with regard to Ukraine.

**Europe’s energy dependence** is another conditioning factor of political divergence within the EU. For example, the impact of Russia’s policy over EU politics towards Ukraine, especially through its bargaining power in the [energy sector](https://www.eia.gov/todayinenergy/detail.php?id=51618) (namely through Russian business proxies Nord stream and Gazprom), led the Union to become more inactive and less effective. Other Russian activities – such as increased activities of [Russian funded media](https://carnegieendowment.org/2018/05/23/russian-election-interference-europe-s-counter-to-fake-news-and-cyber-attacks-pub-76435), intensified contact between Brussels and other **European countries with Moscow**, the spread of [disinformation](https://www.aies.at/download/2018/AIES-Fokus_2018-03.pdf), and the [sponsoring](https://www.opendemocracy.net/en/5050/russia-ukraine-war-putin-europe-far-right-funding-conservatives/) of Eurosceptic political forces – impacted the ability of the **EU to act effectively** in opposition to Russian aggression.

Furthermore, while the implementation of the EU-Ukraine Association Agreement served as an important display of the EU’s economic and political force (soft power) towards Kyiv, Russia continued to be one of the EU’s main economic and [trade partners](https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/russia_en#:~:text=In%202020%2C%20the%20EU%20was,amounted%20to%20%E2%82%AC257.5%20billion.). In fact, European countries with different economic interests continued to negotiate large trade and [energy](https://www.scientificamerican.com/article/europe-races-to-break-energy-ties-with-russia/) deals with Russia at least until February 2022.

This contrasting dual approach led to, even if indirectly, the continuous funding of Moscow’s aggression machine in Ukraine. For example, despite the 2014 [EU arms embargo](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014R0833), according to a recent [report](https://www.investigate-europe.eu/en/2022/eu-states-exported-weapons-to-russia/), ten EU member states (France, Germany, Italy, Austria, Bulgaria, Czech Republic, Croatia, Finland, Slovakia and Spain) exported weapons to Russia until at least 2020. These countries relied on the use of a [legal loophole](https://www.investigate-europe.eu/en/2022/eu-states-exported-weapons-to-russia/) in EU regulations that allowed the continuation of arms exports “contracts concluded before 1 August 2014 or ancillary contracts necessary for the execution of such contracts”. These legal loopholes, combined with other conditioning factors of political divergence, contributed to the half-hearted implementation of the EU sanctions policy.

**Ultimately, Europe could not prevent a Russian military invasion of Ukraine because of the EU’s security idiosyncrasies, nuclear policy choices, divergent political interests, energy dependency and ineffective sanctions policy on Russia**. Despite its failure to prevent the war, Europe has taken [relevant steps](https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/) over the past two months to respond to the invasion: They have rapprochement with their Atlantic allies (the UK and the US) and, among other initiatives, have established a [Strategic Compass on Security and Defence](https://www.eeas.europa.eu/sites/default/files/documents/strategic_compass_en3_web.pdf), which could represent a unique opportunity for the EU tobecome a “more assertive and decisive security provider”.

**2AC – UK is Key**

**UK is key.**

**Forces Network 22** [The American Forces Network (AFN) is a government television and radio broadcast service the U.S. military provides to those stationed or assigned overseas, 02-18-2022, Why does the Royal Navy patrol the North Atlantic and why is Russia a threat?, https://www.forces.net/analysis/why-does-royal-navy-patrol-north-atlantic-and-why-russia-threat] Eric

To prevent their detection, the Royal Navy Vanguard-class **SSBN** is designed to **be exceptionally quiet** and stealthy and almost impossible to find. The Russians know that in the event of war, **destroying this submarine is a key mission**, so they are keen in peacetime to find and track British and American ballistic missile submarines, to record their acoustic signature and make them easier to locate and track in the build-up to conflict.

Preventing Russian submarines from getting close to British submarines and ensuring that any deployment into the North Atlantic **is closely** tracked and monitored is a **key mission** for the Royal Navy to **protect the nuclear deterrent**.

The last big threat posed by Russian forces is their unpredictability and way of operations.

Unlike other countries, Russia uses naval deployments to stage major firepower demonstrations far from home. In early 2022, there was uproar as a Russian Navy task group off the coast of Ireland initially moved to try and conduct a major live-fire serial, which was later cancelled after diplomatic protests.

[Russian military exercises off coast of Ireland 'not welcome'](https://www.forces.net/news/russian-military-exercises-coast-ireland-not-welcome)

[Take a tour of a Royal Navy warship](https://www.forces.net/news/take-tour-royal-navy-warship)

[Know Your Missiles – the UK's most high-tech firepower](https://www.forces.net/technology/weapons-and-kit/know-your-missiles-uks-most-high-tech-firepower)

It is unlikely that Russia would react in a similar manner if NATO were to stage similar live-fire exercises only a few miles off the coast of Murmansk and would be far more aggressive. This unpredictability and willingness to act in a way contrary to how others operate poses a real issue.

Similarly, the deployment of Russian long-range maritime patrol aircraft to support their naval deployments, which often trail lengthy radio cables and pose a threat to civil aviation due to Russian unwillingness to talk to Civilian Air Traffic Control necessitates RAF and other air force deployments of interceptor aircraft to monitor their movements and make sure civil aviation is not at risk.

Brought together, the current Russian threat is both credible and highly unpredictable, which is a dangerous combination.

What are the sorts of Russian ships and submarines that pose a threat to these links though and why are they seen as such a challenge? The Russian fleet of today is a far cry from its Soviet-era highs when it was one of the largest navies in the world, but it is also a long way from the post-1991 lows as well.

The modern Russian navy comprises a mixture of newer ships, built in the last few years and some residual Cold War era vessels. The key threat to UK interests comes primarily from the Russian Northern Fleet, which is based in Murmansk.

The fleet comprises one very elderly aircraft carrier - the Admiral Kuznetsov - which has not been to sea for nearly five years and following fires onboard and refit challenges, is likely to be in a poor material state. While she may not sail again, she is likely to remain in commission as a source of national pride to the Russian navy.

Instead, the biggest surface threat realistically comes from the Kirov class battlecruiser 'Peter the Great', a large surface warship equipped with a wide range of anti-ship and air defence missiles. Used in a flagship role, she is one of the largest and most capable surface warships in the world.

Additionally, there is a single 'Slava' class heavy cruiser - Marshall Ustinov - intended for anti-shipping operations, which is now nearly 40 years old. The Ustinov has been used in a variety of operations, particularly off Syria and working with the Russian aircraft carrier group.

Supporting her are several relatively elderly Udaloy and Sovremenny class destroyers. These ships were built in the Cold War and are increasingly elderly. The role of both classes is to threaten Western submarines and to pose an anti-shipping threat to western warships. Reporting suggests that around three to five of these ships are in the Northern Fleet in various states of readiness.

These vessels are slowly being replaced by the Admiral Gorshkov class of frigates, which have been entering service in recent years. These ships, which were first laid down in the mid-2000s and launched in 2010, only entered service in 2018. Although at least 15 are planned, only two have entered service, with a further one reportedly on sea trials.

These ships are intended to provide ASW protection for Russian ships, but with only two in service, it highlights a potential gap in Russian capability. In times of tension or conflict, they would not have enough modern ships to both tackle Western submarines and protect their own submarine operating areas. In theory, in years to come the Northern fleet is likely to have four of these ships assigned to it, forming the core of its major surface combatant force likely to go into the Atlantic.

For the Royal Navy, the key threat that these surface ships pose in peacetime is their ability to conduct intelligence collection and tracking of UK military assets. As was seen in [the Warship TV show](https://www.forces.net/news/russian-navy-captain-warns-royal-navy-frigate-back-stand-sea), the Russian Navy has deployed Udaloy class escorts off the coast of Scotland to try to conduct intelligence gathering operations near Faslane, home of the Royal Navy SSBN force.

Perhaps the most potent military threat to British interests in the Atlantic comes from Russian submarine forces in the Northern Fleet, which are both numerous and capable. Like the Royal Navy, the Northern Fleet has SSBNs, including older cold war designs like the Typhoon and Delta class submarines, as well as the newer Borei class. In total there are about six SSBNs assigned to the Northern Fleet.

There are a significant number of nuclear attack submarines, including older cold war designs like the Victor, Sierra and the newer Akula class. It is likely that there are about 10 to 12 SSNs in the force, although they are at varying levels of readiness and availability.

The two big contrasts with the Royal Navy is that the Northern Fleet also has several big nuclear submarines like the Oscar and Yansen class, which carry large numbers of cruise missiles. The Russians have used the Oscar class to attack NATO aircraft carrier groups and the submarines are intended to find and sink carrier groups using heavy anti-ship missiles – initially 24 'Shipwreck' missiles, with modernised variants carrying up to 72 Kalibr missiles.

The Royal Navy scrapped its diesel submarine force in the mid-1990s and has since then relied on an entirely nuclear-powered submarine flotilla. By contrast, the Russian Navy **continues to make use of the Kilo and Lada** class to conduct a range of missions and these remain capable vessels able to operate in a range of operations, particularly in shallower waters where nuclear submarines (which are larger), **may be more restricted** in their ability to manoeuvre.

In addition to the more traditional surface warships and submarines, the Northern Fleet also **has access to a variety of special operations and intelligence gathering vessels**, including submarines and specialist surface ships. These are used **to carry out covert operations,** which can include collecting intelligence, tapping cables or other discrete operations.

These ships can pose a credible threat to British and wider NATO military operations and security by their ability to monitor movements, intercept communication traffic and conduct wider intelligence-gathering operations. This means that monitoring and tracking them is vital to ensure that they do not pose a clear threat to western military operations.

How then does the UK respond to the threat posed by Russian forces? The Royal Navy and Royal Air Force can respond using a variety of different platforms in UK waters, as well as working with NATO more widely.

From an international perspective, one of the most effective ways of tracking and deterring Russian activity is through NATO. The alliance has a series of well-tried and tested collaborative agreements to enable the tracking and monitoring of Russian warships and aircraft, which means that the UK (and NATO) generally have a very good idea **of their location** and can react accordingly.

This could include providing close-in escorts to ships sailing close to NATO member states areas of interest or carrying out aerial surveillance. Alternatively, it enables NATO navies to consider their planned operations and ship movements and if needs be, move or delay them to avoid encountering Russian vessels.

The Senior Service has a range of ship types able to counter the Russian threat. Most Royal Navy surface ships can, and have, been used to escort Russian vessels when in UK waters of interest to monitor and track their activity.

The most commonly used ships include the River-class offshore patrol vessels, which are used for a lot of different maritime surveillance tasks, from fishery protection to escorting Russian ships. Although lightly armed, they are ideal for keeping station with Russian vessels passing through the Channel, or other areas and monitoring their activity and behaviour.

Although Type 45 destroyers are sometimes used to escort ships, the main Royal Navy escort vessel used to track and monitor the Russian threat is the Type 23 frigate. This ship class, which forms the bulk of the Royal Navy's surface fleet, has eight ships with 'towed array sonar' which is a sonar that can be trailed behind the ship to listen passively for submarines in the area.

The Type 23 force, like HMS Northumberland in the Warship TV series, are intended to track and in wartime, destroy enemy submarines. They are extremely capable at this task, as they are fitted with a wide range of sensors, including sonars, and highly capable radars to track both submarines and surface ships.

They also carry a wide range of weapons including a 4.5"-gun, anti-aircraft missiles and stingray torpedoes. They also deploy with a Merlin helicopter, one of the most capable large ASW helicopters in the world, which can be used to track submarines some distance from the ship and monitor their activity.

These ships are regularly deployed on operations to monitor Russian activity, often in a range of sensitive waters far from home. It is notable that even though practically nothing is said about what they are doing there, many Type 23s in recent years have deployed north of the Arctic circle and returned home with 'blue noses' to indicate a deployment into the far north.

These ships have been in service for many years now and although extensively modernised, are clearly beginning to age. Their replacements are already under construction, with the Type 26 frigate, nearly twice the size of the Type 23, now being built in Glasgow, with the first due to be launched within the next year.

The Type 26 will be an extremely capable ASW platform, representing new technology and sensors and being able to tackle the threat by the next generation of Russian submarines. The design has been sold to Australia and Canada, who are also building them and in turn, it may yet be sold elsewhere. The Royal Navy has an exceptional platform for the future of ASW operations with the Type 26.

Under the water, the UK response is likely to come from one of its fearsome Astute class submarines. The hugely advanced nuclear-powered attack submarines are well equipped to track and monitor Russian surface and submarine activity.

Their role is to monitor shipping, conduct intelligence gathering and also protect Royal Navy SSBNs on patrol. One of their key roles is to be deployed out to monitor and if needs be, pose a real tactical threat to Russian nuclear attack submarines that are getting too close to UK areas of critical national interest.

Although little is publicly said of their work, it is safe to assume that wherever there are risks from Russian submarines to UK interests, be they SSBNs or cables, a Royal Navy SSN is almost certainly on the case to protect them.

Above the sea, the Royal Air Force is also able to help monitor events through its newly introduced P8 force. These maritime patrol aircraft, which have replaced the Nimrod, are based at RAF Lossiemouth and are used as long-range maritime patrol surveillance aircraft, capable of monitoring shipping movements, tracking activity and also carrying out ASW work.

Equipped with capable submarine detection systems and Mk46 torpedoes, the P8 is a hugely capable addition to the RAF that is intended to provide a very potent long-distance ASW capability. It will be used to track hostile submarines at some distance from home, tracking their activity and if needs be, working with Merlin helicopters and Type 23 frigates to provide a comprehensive defence that can tackle any submarine threat.  The result is a highly capable integrated force that can work exceptionally well together, able to tackle a wide range of challenges posed by the modern Russian Navy.

Overall then, although the Russian Navy does pose a meaningful and credible threat to UK interests and has, over the years, quietly equipped itself with some capable new technology, it is also fair to say that the UK has not been resting on its laurels either.

What this means is that even **if the Russian Navy does** **want to threaten cables** of interest, or try to track the Royal Navy SSBN force, **it will find itself matched against an equally capable Royal Navy**, which, **working with NATO partners**, will do all it can to ensure that any potential **threat is properly mitigated.**

The result is that although Russia can and does, deploy ships and submarines to pose a challenge to UK operations in highly sensitive waters, **it is always tracked, monitored, and deterred by the highly capable British Armed Force**s, **who are able to act in a professional manner throughout.**

**2AC – Canada is Key**

**Canada is key.**

**Taylor 20** [Major Corey Taylor is a candidate attending the Canadian Forces College, 05-06-2020, https://www.cfc.forces.gc.ca/259/290/22/286/taylor.pdf] Eric

Canada **is a leader in Al**, having released the first national Al strategy in 2017 and consistently appearing high in rankings of top countries **for Al research**.226 Previous chapters have highlighted the extent to which Canada's Data Strategy, Defence Policy and MND mandate letter seek to integrate ML and Al technologies **into military platforms**. While much Of the focus in these documents is on managing the large flow if data from future platforms, and within the bureaucracy ofthe organization itself, a summary of the status and future plans for ASW-specific platforms and their potential to utilize ML follows.

Aircraft

Having just reached Interim Operational Capability in 2018 and projected to be fully operationally capable in 2025, the CH-148 Cyclone is Canada's newest ASW platform. The standard crew for the Cyclone is two pilots, one ACSO TACCO, and a single Sensor Operator responsible for a number Of leading-edge sensors, including passive acoustics and the HELRAS active SONAR, claimed to be the "highest-performance helicopter dipping SONAR in the world."227 Ifthe advertised performance Of Other modern equivalents is accurate, this could entail an increase in "detection ranges from three to seven times that oflegacy systems. "228 The SONAR is also claimed to be interoperable "with shipboard SONARs and sonobuoys in bistatic or multistatic employment."229 The adoption ofrv1L algorithms to optimally process passive and active SONARs, in particular multi-static operations, would augment the capability of the single sensor operator and would arguably optimize fusion Of data with and from other platforms. The CP-140 Aurora, in service since 1980, has undergone numerous upgrades to modernize its sensor suite and has received modifications to extend its service life until 2030.230 Canada's project to replace the Aurora is in the very early stages and no Statement of Requirements exists yet, but SSE specifically mentions recapitalization Of the CP-140 fleet.231 Given that Canada has signed on to the NATO M3A forum, it can be assumed that any replacement for the Aurora will have similar requirements to those outlined for M3A elsewhere in this paper.232 As previously discussed, these requirements do not specifically refer to Al or ML systems on board, but do extensively mention advances in sensors and computer processing capability. For human operators, the challenge Of dealing with the volume of information being generated by the current version Of the CP-140 will only increase with the adoption of the latest block of upgrades, and will certainly be a consideration with any replacement platform. While tactics are continually being developed to account for "the volume of information now being generated by the sensor systems" Of the upgraded CP-140, human operators could become a limiting factor on what current or future Canadian ASW aircraft can achieve, given the untapped potential of the systems on board.233 the addition of computing equipment. If, however, the two entire crew stations for Acoustic Sensor Operators were to be removed entirely, including desk space, monitors, chairs and the protective equipment for the operators, along with not having two or more operators on board each mission, hundreds Of kilograms and several square meters could be freed up, which would likely be necessary given the size and space requirements for the computing power that would be required. On a next-generation platform, these considerations could be made while the platform is being designed, either for a new build or to be easily retrofitted once a system is ready, so that power, weight, balance and centre Of gravity challenges could be avoided.

Halifax Class Frigate

The Halifax-class frigates have been in service with the RCN since 1992 and have gone through a modernization project which included upgrades to systems, addition of new capabilities and extended the service life Out until the delivery Of the next generation Of ships.2 They **are "multi-purpose platforms**" designed and built in the latter stages Of the Cold War, with an emphasis on ASW, to "operate **in the Northern Atlantic** **and find Soviet nuclear submarines**."235 The ships' ASW systems are being upgraded through the Underwater Warfare Suite Upgrade (UWSU), which includes a new Towed Array SONAR, Hull Mounted SONARs and the Torpedo SONAR Intercept & Classification system, which can detect SONAR from enemy torpedoes, **and "offer unique capabilities and world leading performance**."236 The improved sensors and SONARs 'Swill be able to detect quieter targets at increased ranges providing the greatest possible detection capability to protect ships from underwater threats," which "increases the window operators and command teams have for decision making."237 This system, while highly advanced, still relies on human sensor operators to interpret the incoming information. As discussed throughout this paper, **integration of ML systems** with capable sensors **could allow optimum performance** in ASW scenarios.

Canadian Surface Combatant

The Canadian Surface Combatant (CSC) will be the replacement for the Halifax Class, with deliveries planned beginning in the mid 2020s and continuing until the late 2040s.238 The Type 26 design will feature an "**acoustically quiet hull**," and "an **advanced SONAR system** with a towed array system **for tracking submarines**."239 Beyond these details, not much is known about its planned sensor systems, except that the RCN has explicitly stated that it is 'Snot pursuing any Al that is connected to employing weapon systems."240 This paper has argued throughout that ML should be used to provide decision-makers **with high quality information** to inform tactical decisions. With the capability of sensors that will exist by the time the final ships are delivered and the rapid advances in Artificial Intelligence and Machine Learning, it seems certain that the CSC will incorporate ML for sensor operation at some point in its lifespan, but to what degree, and when, is yet to be determined. As a central ASW platform, **interoperability with allies** and future aircraft will be **essential** and foresight and significant planning will need to SSE identifies the Victoria-Class submarines (VCS) as a key element of maritime domain awareness, through their sub-surface surveillance role, and highlights the importance of their role in sovereignty operations and continental defence.241 The four submarines, which were brought into service by Canada beginning in 2000, were scheduled to reach their end Of service lives beginning in 2022, but will now undergo an incremental modernization programme, "which will ensure **their continued effectiveness** Out to the mid-2030s."242 The VCS acoustic sensors include an active/passive bow SONAR, a towed array system and a flank array, which is slated for upgrade in the Victoria Class Modernization Program, in order to achieve "better detection and performance."24 It is unlikely that ML is being considered for addition to the upgraded systems, given the position Of the RCN against incorporating Al, but as with the next generation Of surface ships, it may be essential to further improve the **operating capacity** of the SONAR systems and manage the amount Of information generated on board.

Shore-Based SONAR Ops and AES Ops are also employed in acoustic analysis roles at the Naval Ocean Processing Facility (NOPF) at Whidbey Island, in the U.S., at the Acoustic Data Analysis Centre (ADAC) department Of the Trinity Naval Intelligence unit in Halifax? and at Acoustic Sensor Analysis (ASA) sections on maritime helicopter and long range patrol home Wings. At NOPF Whidbey Island, the 30 CAF personnel assist in providing "timely and accurate acoustic cueing to operating and supporting forces, and conduct continuous maritime surveillance," by analyzing information from either the five Surveillance Towed Array Sensor System (SURTASS) ships, which operate a towed hydrophone array over 8,000 feet long, or working on the operations watch floor, which monitors a network Of fixed arrays. At ADAC and ASA, they analyze recorded acoustic information from operational platforms to derive acoustic intelligence and assess submarine and Other contact encountered by operators, which is then fed back into intelligence and training products and debriefs to crews to prepare them for follow-on missions. In any of these positions, incorporation ofML to analyze the extensive acoustic data coming in to the facilities would significantly expand the capability ofthese organizations to increase their outputs in terms of tactical advice and intelligence products to higher command and the on-platform operators.

**DoS**

**1AR – Military Integration Key**

**Lack of beefing up NATO deterrence sends a signal of strength to Russia.**

**Grady 22** [John Grady, a former managing editor of Navy Times, retired as director of communications for the Association of the United States Army, 3-30-2022, Baltic Presidents: 'Forward Defense' Needed to Deter Russia, USNI News, https://news.usni.org/2022/03/30/baltic-presidents-forward-defense-needed-to-deter-russia] Eric

The movement **of more forces** eastward **sends “a very strong signal** to Moscow we’re ready to defend the territory of NATO,” Levits said. The additional battle groups brings to more than 9,000 NATO soldiers to Latvia. These forces have come primarily from the United States, United Kingdom and Germany.

All three wanted a permanent beefed-up presence for eastern Europe on the NATO agenda for June’s meeting in Madrid. Having a long history of Russian occupation following World War II, the three were admitted in 2004 to the alliance.

Karis said, “there was no alternative” **then to joining for mutual security,** and ”no alternative now.”

Madrid will be “where concrete decisions will be made” on permanent forward stationing is made, Levits added.

Nauseda said increased NATO presence to the Baltic states also **means moving in advanced systems** and other equipment, especially air and missile **defense weapons** to the Baltic states as well as more air and ground forces. For Lithuania’s part, it has already increased its spending on security and has begun improving infrastructure to better facilitate the movement of NATO forces and equipment to his nation and stationing there.

With the Russian invasion stalemated in Ukraine, the possibility of Moscow using chemical or biological weapons or tactical nuclear weapons to get its way “would change the situation completely” of NATO’s response, Levits said.

Nauseda added, “in recent weeks, Russia has crossed so many red lines” by invading Ukraine, “NATO should be very decisive in its response” if weapons of mass destruction were employed. Without spelling out an exact alliance response, Nauseda said military options should be on the table in that case.

Karis said the Kremlin’s use of weapons of mass destruction in Ukraine could drive long-time alliance partners Finland and Sweden to seek NATO membership.

On imposing a “no-fly zone” over all or parts of Ukraine, the presidents said that decision would have to rest with nations capable of carrying out such a mission. Options like a no-fly zone “must be credible,” Nauseda said, and should be aimed at not provoking a Russian escalation.

He suggested no-fly zones around nuclear plants and facilities as a possibility.

As to how the conflict will end, Karis said it cannot end at any price. “I would be very cautious” about negotiations with the Kremlin now, he said.

Levits added, “the territory of Ukraine [must be] restored,” its security stable and the “the Russians should go back.”

The Lithuanian president saw the American and European Union sanctions working in not only hitting Russian oligarchs but reaching its middle class. The pressure, he said, is being felt in Moscow’s financial sector and its exporting of strategic materials and energy, its prime source of foreign revenue. He wanted the United States and Europe to look at means to close any loopholes that Moscow is using to get around the sanctions, “namely China.”

The three said their nations are moving rapidly to reduce their energy dependence on Russian supplies. To fill the gap, the three presidents are looking to the United States for liquified natural gas shipments to meet their future needs.

But “the worse thing that can happen is a frozen conflict” in Ukraine, Karis said, where refugees are left homeless for years.

“We are seeing millions and millions of refugees” fleeing to Moldova, Poland and other eastern European nations, he said. “They **have to be integrated”** into the societies where they have sought refuge. He added the impact on those nations will be felt in their school and medical systems and the need to provide humanitarian assistance.

**Unilat CP**

**2AC – Deficit**

**Perception of isolation causes quick Russian strike – “day-to-day” unified forces are key.**

**Mahshie 21** [Abraham Mahshie is the Pentagon Editor for Air Force Magazine. As a journalist with two decades of experience, he has covered national security and political affairs across the United States and Latin America for a variety of media. He has also served as a diplomat and defense contractor. Abraham grew up in Miami, Fla., and is fluent in Spanish and Portuguese. He earned his B.A. from Dartmouth College and his M.A. at the University of Missouri School of Journalism, 12-15-2021, Black Sea NATO Allies Call for Added Security Amid Russian Buildup, Air Force Magazine, https://www.airforcemag.com/black-sea-nato-allies-call-for-added-security-amid-russian-buildup/] Eric

The Russian troop buildup on the Ukrainian border and in the heavily militarized Black Sea region has **led to calls** by Black Sea allies **to increase NATO and U.S. deterrence** to prevent further Russian efforts **to divide** and **isolate** some of the alliance’s newest members.

With over 100,000 Russian troops surrounding Ukraine on three sides and activity consistent with combat preparation, the Biden administration has opted to pursue diplomacy with Russia following a Dec. 7 virtual summit between President Joe Biden and Russian President Vladimir Putin. But NATO allies who are members of the Bucharest Nine (B9) group of eastern flank nations have indicated to Biden and National Security Advisor Jake Sullivan on a Dec. 16 call that more American presence is needed now to deter an invasion of Ukraine.

“If the U.S. and NATO are not careful, the Black Sea will be a Russian lake,” Romanian military attaché in Washington, D.C., Col. Catalin-Constantin Mihalache told Air Force Magazine, noting how Russia has increased and modernized its Western region forces.

“The goal in the Black Sea **is to isolate NATO regional partners**, Georgia and Ukraine, by taking advantage of the lack of strategic and comprehensive **day-to-day** NATO presence and strategy,” he added.

Following a Dec. 10 B9 call with Biden, Romanian President Klaus Iohannis [took to Twitter](https://twitter.com/KlausIohannis?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor)to highlight the case he made to Biden.

“I … underlined [Romanian] support for an increased NATO & US military presence in #Romania & at the #BlackSea,” he wrote.

Mihalache said the Russian invasion of Ukraine is a national security concern for Romania and NATO. Russian-occupied Crimea, which has become a heavily militarized anti-access/area denial (A2/AD) bastion in the Black Sea since annexation in 2014, is just 200 miles from Romania’s shores.

“It’s closing the distance,” he said of a potential further Russian incursion of Ukraine. “Russia will approach not only Romania but will be close to the NATO border.”

An Oct. 27 Senate Foreign Relations Committee hearing on Black Sea security detailed an uneven NATO policy of enhanced forward presence in the Baltic nations and tailored forward presence in southeastern Europe. Experts suggested that directing more robust assistance to the north led Russia to concentrate its aggression in the south. Romania established a NATO Multinational Corps South-East headquarters in Sibiu in part to encourage an increase in allied presence.

“We are very determined to build our capability and to have NATO and the U.S. join us in this effort and support us,” Mihalache said, noting that Romania also awaits a decision about global force posture that could lead to additional U.S. troops in the country. About 1,000 U.S. troops are present at any given time in Romania.

In his role as the air attaché, the Romanian official highlighted the importance of the NATO Black Sea posture and current cooperation with the U.S.

“The air domain is key for the credibility and effectiveness of the allied regional collective posture,” Mihalache explained. “The U.S. presence and persistent contribution of ISR and situational awareness is making the allied regional progress.”

The U.S. [began basing MQ-9 Reapers](https://www.airforcemag.com/mq-9s-in-romania-provide-constant-isr-over-the-balkans/) at Romanian Air Base 71 in Campia Turzii in January. Romania maintains a small Air Force of F-16s and Soviet-era MiG-21s upgraded with Israeli technology. Romania also benefits from NATO air policing.

Mihalache said Romania’s Air Force plans a purchase of two squadrons of F-16s from Norway that will eventually replace the MiG-21s.

Romania also has the first Patriot missile defense system on the eastern flank. Some of the seven batteries contracted are operational, while others have yet to arrive.

Mihalache highlighted the recent presence of an American bomber task force supported by Romanian F-16s.

U.S. Pursues Diplomacy, Holds Back Military Aid for Now

A senior administration official briefing reporters Dec. 17 said the 2014 Minsk negotiations, which led to a quieting of hostilities with Russian-backed separatists in southeastern Ukraine, are the principal format the U.S. is advocating for to resolve the crisis on the border.

“But the U.S. is prepared to use our bilateral channels to Moscow and to Kyiv to support, if we can,” the official said.

In recent days, State Department officials have visited Moscow to entertain Russian proposals for moving forward. In the past, Putin has said Ukraine or Georgia entry into NATO is a red line, and he has discouraged military assistance to the countries.

Members of Congress have nonetheless urged Biden to answer a [November request from Ukraine](https://www.airforcemag.com/ukraine-requests-new-defense-assistance-amid-increased-tensions-with-russia/) for additional military assistance, including air defenses that the country says are necessary to deter a Russian invasion. A [Ukrainian defense official recently told](https://www.airforcemag.com/ukraine-says-it-can-deter-a-russian-invasion-with-air-defense-nato-calls-for-adjustments/)Air Force Magazine that an American [air defense team was in the country](https://www.airforcemag.com/with-russia-on-multiple-fronts-dod-team-in-ukraine-assesses-air-defense-needs/) to assess needs, but no announcement of new assistance has been made.

“We are also in intensive dialogue with the Ukrainians at all levels, including DOD and EUCOM [U.S. European Command], with regard to their needs,” the administration official said, adding that the conversation included allies who may be able to offer defense assistance. “We will continue to keep those lines open as necessary and as we see what the Ukrainian requirements are.”  
  
In a Dec. 16 congressional hearing titled “Defending Ukraine, Deterring Putin,” Andrew Bowen, an analyst in Russian and European affairs at the Congressional Research Service, identified the U.S. NATO Black Sea presence as the rationale for Russia’s hostility.

“Russian political and military leaders assert that the increased expansion of NATO and the presence of … European and U.S. military forces on its border and Black Sea are an existential security threat to Russia,” he said.

Bowen said the leaders are concerned that NATO and U.S. military forces will eventually place long-range precision strike missile defense systems nearby. Romania already has a High Mobility Artillery Rocket System (HIMARS), a light multiple rocket launcher.

The defense official also said the southeastern flank needs better investment in command-and-control capabilities and access to satellite reconnaissance data. Adding the capabilities to the southeastern flank, he argued, would make protection and deterrence at the eastern border of NATO more uniform.

“The allied approach **needs to be firm and credible** and requires **united** and **coherent** deterrent efforts to the **entire** flank,” he said.

“This is an unprecedented challenge in the post-Cold War because we didn’t have such an escalation since the end of the Cold War,” Mihalache continued. **“It requires our allied and U.S. immediate reaction and attention.”**

**Marine Domain awareness HAS to be unified – information-sharing is only possible through a unified presence.**

**Sumangil et al. 19** [Ed Sumangil is a CSAF Fellow at the Institute for National Strategic Studies at the National Defense University, November 2019, National Defense University INSS, https://inss.ndu.edu/Portals/68/Documents/stratforum/SF-301.pdf] Eric

To deny Russia the initiative in shaping the security landscape of the Baltic Sea, Allies and partners should **build comprehensive** maritime security by **integrating** their maritime law enforcement and naval capabilities. This requires **shared** maritime domain awareness.83 Since 2006, the Sea Surveillance Co-operation Finland-Sweden interface enables Finland and Sweden to exchange classified target information, up to and including secret, in the Baltic Sea. The unclassified Sea Surveillance Co-operation Baltic States and the European Union’s Maritime Surveillance Networking further promote Baltic Sea security.84 Finland and Sweden have lead roles in both. However, regional maritime information-sharing could be improved. By implementing a **multilevel information architecture**, armed forces of NATO members and partners could share classified information of the **entire conflict spectrum,** while providing user-defined, unclassified, operational pictures suitable for their law enforcement agencies.85

To counter Russian pursuit of hybrid warfare aimed at destabilizing its neighbors in the BSR by measures short of clear-cut military action, active patrols by maritime law enforcement and naval vessels are instrumental to remain left of bang. Information-gathering and dissemination during patrols would improve shared maritime domain awareness. In contrast to China’s modus operandi in the South China Sea, Russia has solely used military assets to harass its neighbors’ maritime exploration activities.86 Notwithstanding, both violate international law as laid down in the 1982 United Nations Convention on the Law of the Sea. To avoid escalation, maritime law enforcement agencies should continue to enforce maritime law, but their crews may require naval support if challenged by the Baltic Fleet. Finland and Sweden have noted the need for improved interagency coordination in their Total Defense concepts. The need for such coordination is apparent also on a regional scale.

To hold Russia accountable for unlawful or hostile actions under the threshold that would trigger invocation of a NATO Article 5 response, coordinated strategic communication on a regional basis would leverage efforts made by individual states. Diplomatic signaling and show of force by patrols by U.S. Navy and standing NATO maritime forces are instrumental to deter Russian military aggression at sea, since capability and resolve to respond to Russian escalation in the BSR are prerequisites for a deterrence-by-denial strategy. NATO must coordinate such measures with Finland and Sweden, which both possess territories and capabilities critical to staging an allied intervention in the region.

**Satellites CP**

**Sats Fail**

**Sats cant track subs --- sub prolif means you wont be able to tell which belongs to which**

**Friedman ‘19**

(Norman Friedman is an American author and naval analyst. He has written over 40 books on naval matters and holds a doctorate in theoretical physics from Columbia University. From 1973 to 1984 he worked at the Hudson Institute, becoming Deputy Director for National Security Affairs. He worked for over a decade as a direct consultant to the US Secretary of the Navy and has also worked as a consultant for the US Navy, “STRATEGIC SUBMARINES AND STRATEGIC STABILITY : LOOKING TOWARDS THE 2030s,” pg online @ <https://nsc.crawford.anu.edu.au/sites/default/files/publication/nsc_crawford_anu_edu_au/2019-09/publish_nsc_publication_strategic_submarines_2019_1.pdf> //um-ef)

In 2019 there are four more nuclear powers (India, Pakistan, Israel and North Korea) each of which has its own concerns and ambitions. Iran is probably close to having nuclear weapons, reportedly with extensive North Korean help. It seems likely that within a decade, and probably a good deal sooner, Japan will have nuclear weapons as a deterrent against North Korea and, to a lesser extent, China. South Korea will quite possibly develop weapons of its own to deter the North Koreans and possibly also to threaten Japan. We now know that during the 1970s Taiwan had a very active bomb program (which the US derailed) and it may well return. There are also other potential candidates. Saudi Arabia, for example, has long been a rival of Iran for primacy in the Islamic world. The Saudis once bought Chinese intermediate-range ballistic missiles (presumably as a threat to Iran) and for many years the Saudis underwrote the Pakistani military in return for a pledge of support in an emergency. Such nuclear proliferation has a twofold bearing on the submarine problem. First, some of these countries will deploy secure deterrents in the form of submarines. Imagine the impact of a much more numerous multinational submarine force on a ‘transparent ocean’ system. The systems typically envisaged would operate from space and would be able **to detect submarines but would have little or no ability to distinguish one submarine from another**. The larger the number of submarines operating at sea, **the better the chance that a space-based** (or, for that matter high altitude) **ocean surveillance system** **would pick up non-targets**. It would be embarrassing enough if the attack triggered by such a system failed to destroy some of its targets. It would be a lot worse if it targeted the wrong submarines. Their destruction would warn the real targets and might trigger an attack before they could be destroyed.

**DSCA Answers**

**2AC – Taiwan Thumper**

**Taiwan sale thumps – it was millions.**

**Beech 22** [Eric Beech is a writer for Reuters, 7-15-2022, U.S. approves possible sale of military assistance to Taiwan, https://www.reuters.com/world/asia-pacific/us-approves-possible-sale-military-assistance-taiwan-2022-07-15/] Eric

WASHINGTON, July 15 (Reuters) - The U.S. State Department has approved the potential sale of military technical assistance to Taiwan worth an estimated **$108 million**, the Pentagon said on Friday.

China has never renounced the use of force to bring Taiwan under its control, and the democratically governed island has complained of increased military pressure from Beijing to try and force it to accept its sovereignty.

The United States has only unofficial relations with Taipei. But U.S. law requires Washington to provide Taiwan with the means to defend itself, and President Joe Biden's administration has vowed to step up engagement with the island.

Taiwan requested the latest assistance, including spare and repair parts for tanks and combat vehicles, and U.S. government and contractor technical and logistical support, the Pentagon said.

"The proposed sale will contribute to the sustainment of the recipient's vehicles, small arms, combat weapon systems, and logistical support items, enhancing its ability to meet current and future threats," the Pentagon's **Defense Security Cooperation Agency** said in a statement.

**1AR – Link – Subs are Inevitable**

**AI development of subs are happening now**

**Keller 22** [John Keller is the Editor-in-Chief, Military & Aerospace Electronics Magazine--provides extensive coverage and analysis of enabling electronics and optoelectronic technologies in military, space and commercial aviation applications, 6-28-2022, Researchers ask industry for enabling technologies in artificial intelligence (AI) and machine automation, Military Aerospace, https://www.militaryaerospace.com/computers/article/14278766/enabling-technologies-artificial-intelligence-machine-autonomy] Eric

ARLINGTON, Va. – U.S. military researchers are asking the defense industry to develop revolutionary [enabling technologies](https://www.militaryaerospace.com/unmanned/article/14210964/enabling-technologies-for-urban-air-mobility) for land, sea, air, and space applications that would put U.S. forces far ahead of any potential adversaries.

Officials of the U.S. Defense Advanced Research Projects Agency (**DARPA**) in Arlington, Va., issued a broad agency announcement last week (HR001121S0029) for another part of the Redefining Possible project, which places **heavy reliance** on [artificial intelligence (**AI**)](https://www.militaryaerospace.com/computers/article/14206127/artificial-intelligence-ai-share-experiences-machine-learning) and machine automation.

Potential U.S. adversaries **such as Russia and China** have developed ways to counter today's U.S. military systems that are built around exquisite, monolithic integrated systems. Instead, DARPA researchers want to develop revolutionary system architectures that are separate, dispersed, disruptive, and that instill doubt in U.S. adversaries.

DARPA experts want to identify promising technologies and **move them quickly to the next phase of research and development**. Technologies should improve resilience, responsiveness, range, lethality, access, endurance, and affordability to enable new joint force warfighting concepts. Many of these technologies rely on AI and [machine autonomy](https://www.militaryaerospace.com/computers/article/14277721/artificial-intelligence-ai-machine-autonomy-command-and-control).

For aircraft, researchers point out that traditional stealth technologies are approaching their limits, and that potential adversaries have developed several different countermeasures to U.S. stealth aircraft technologies.

Moreover, DARPA officials say they are interested in systems to counter the proliferation of advanced integrated air defense systems (IADS), including extremely capable surface-to-air and air-to-air missiles.

DARPA also is interested in aircraft-related enabling technologies that:

-- enable next generation unmanned aerial systems;  
-- use distributed, disaggregated systems to reduce reliance on small numbers of exquisite platforms;  
-- enable timely delivery of targeting data and tactical targeting;

-- enable aircraft capabilities that previously have not been exploited;  
-- enable levels of machine autonomy that can minimize the risk to human warfighters, and make platforms more attritable, and allow piloted and autonomous systems to operate in concert; and  
-- enable development and fielding systems more rapidly, such as model-based systems engineering, multi-dimensional optimization, and additive manufacturing.

For ground systems, DARPA researchers are interested in enabling technologies that:

-- coordinate and plan in the presence of adversaries with limited knowledge of the environment, can handle battlefield surprises, and adapt to new events;  
-- protect soldiers, and extend the warfighter's range;  
-- amplify effects, and reconfigure to account for attrition;  
-- help develop autonomous systems that operating quickly;  
-- incorporate advances in machine autonomy for integrated manned and unmanned ground operations;  
-- provide small units or individual warfighters with improved mobility and lethality; and  
-- expand the ability for ground forces to deal with air threats, operate inside the interiors of buildings, and use natural and pre-dug subterranean environments.

For maritime systems, DARPA researchers are interested in enabling technologies that:

-- enable a dispersed system-of-systems architecture that complicates an adversary's plans by reducing warfighting reliance on monolithic, high-value surface and sub-surface assets;  
-- organically defeat raids of sea-skimming high-speed missiles;  
-- counter **advanced submarines**, sea mines, **and unmanned underwater vehicles (UUVs)**, and defeat advanced torpedoes;  
-- mature ways to protect U.S. waterways and port facilities;  
-- provide a persistent presence in harsh environments such as the arctic, to include long-duration, minimum maintenance, and safe navigation;  
-- disperse and disaggregate maritime assets using small, inexpensive, networked vessels with in AI and machine autonomy; and  
-- capitalize the undersea domain to impose doubt on adversaries by projecting power into all other domains.

For space systems, DARPA is interested in enabling technologies that:

-- complicate an adversary's counter-space capabilities by reducing warfighting reliance on monolithic, long lead-time, high-value space assets and instruments;

-- counter emerging threats in a contested space environment;  
-- reduce reliance on large, expensive, and increasingly vulnerable geostationary equatorial orbit (GEO) satellites;  
-- exploit AI and deep learning technologies evaluate data from many satellites, and create dynamic kill chains; and  
-- advance material science, manufacturing, and computational techniques to reduce the size, weight, and costs.

**1AR – Normal Means – DARPA**

**Primary enforcer of AI innovation**

**Verma 22** [Pranshu Verma is a reporter on The Washington Post's technology team, where he covers the innovations fueling tomorrow and the dark side of technology. Before joining The Post in 2022, Verma covered technology at the Boston Globe. Before that, he covered diplomacy and transportation at the New York Times as a reporting fellow in D.C. He started his career in journalism at the Philadelphia Inquirer as a reporting fellow covering prisons and New Jersey politics. Verma is a graduate of Columbia University's Graduate School of Journalism and the University of Delaware, 3-29-2022, The military wants AI to replace human decision-making in battle, Washington Post, https://www.washingtonpost.com/technology/2022/03/29/darpa-artificial-intelligence-battlefield-medical-decisions/] Eric

The Defense Advanced Research Projects Agency (DARPA) — **the innovation arm** of the U.S. military — is aiming to answer these thorny questions by outsourcing the decision-making process to artificial intelligence. Through a new program, called In the Moment, it wants to develop technology that would make quick decisions in stressful situations using algorithms and data, arguing that removing human biases may save lives, according to details from the program’s [launch](https://www.darpa.mil/news-events/2022-03-03) this month.

**Its explicitly distinct from the DoD**

**CRS 21** [The Congressional Research Service is a public policy research institute of the United States Congress. Operating within the Library of Congress, it works primarily and directly for members of Congress and their committees and staff on a confidential, nonpartisan basis, 08-19-2021, Congressional Research Service, https://sgp.fas.org/crs/natsec/R45088.pdf] Eric

When DARPA was established in 1958 it was created as **an independent R&D agency** explicitly separate **from the R&D** organizations **of the military services.** This construct has allowed DARPA to support R&D and technology efforts **that are not tied to formal military requirements** or to the specific roles or missions of the military services.39 Instead DARPA’s role in the DOD R&D enterprise has been to cut across the traditional jurisdictions of the military services and to explore new and unconventional concepts that have the possibility of leading to revolutionary advances in the technological capabilities of the military—potentially **revising the traditional roles** and missions of the military services.

**AT: Strategic Stability DA (Subs)**

**2AC—NU**

**Russia is modernizing now, nuclear missiles set targeting NATO allies**

**Geller and Brookes 21** – Geller is a senior policy analyst for nuclear deterrence and missile defense. Brookes researches and develops Heritage’s policy on weapons of mass destruction and counter proliferation. (Patty-Jane Geller and Peter Brookes, “The Increasing Russian Nuclear Threat,” The Heritage Foundation, 4/6/2021, <https://carnegieendowment.org/2020/01/29/russia-is-updating-their-nuclear-weapons-what-does-that-mean-for-rest-of-us-pub-80895)//mcu>

In the big strategic game, the Russians and Americans have the same reason for modernizing their nuclear forces: they want to maintain parity. If the two sides have the same number of nuclear warheads deployed, then they will not be tempted to shoot at each other. They also have a reason to avoid an arms race that would entail constantly seeking more nuclear weapons to try to achieve superiority—however temporary. As expensive as nuclear weapons and their delivery vehicles are, parity has kept the costs down by holding the arms race in check. In the past few years, President Vladimir Putin does seem to be after nuclear weapons for another reason—to show that Russia is still a great power to be reckoned with. He has been trumpeting new and exotic systems that are unique, like the nuclear weapon delivery system known as the Burevestnik nuclear-propelled cruise missile. These exotic systems have more of a political function than a strategic or security one. Their role is to signal Russia’s continuing scientific and military prowess at a time when the country does not otherwise have much on offer. Devilishly expensive and sometimes dangerous to operate, they are unlikely to be deployed in big numbers, as a 2019 fatal testing accident of the Burevestnik shows. If U.S.-Russian arms control remains in place, such systems definitely will not be deployed in big numbers, because they would displace proven and highly reliable intercontinental ballistic missiles in the Russian force structure. These ballistic missiles are the backbone of nuclear deterrence for Russia. The exotics don’t add to that deterrent. They have some show-off value, but they will do no more than make the rubble bounce. WHAT ARE EUROPEAN CONCERNS WITH RUSSIA’S NUCLEAR WEAPON MODERNIZATION? The Europeans, most prominently the NATO allies, are very concerned about Russia’s nuclear modernization programs. Their concerns revolve more around new nuclear missiles to be deployed on European soil than the intercontinental systems that threaten the United States. Poland and Lithuania, for example, are NATO countries bordering Kaliningrad, a Russian enclave in the heart of NATO territory. **Russia has put increasingly capable missiles there**, including the Iskander, a highly accurate modern missile that is capable of launching either **nuclear** or conventional warheads. . Likewise, the Europeans are of one mind about the threat posed by a missile known as the 9M729 (SSC-8 in NATO parlance), which is an intermediate-range ground-launched cruise missile that the Russians developed and deployed in violation of the Intermediate-Range Nuclear Forces (INF) Treaty. The allies all agree that this missile poses a threat to NATO. Although it has not been deployed forward in Kaliningrad, its range is sufficient to threaten all of NATO Europe when deployed in European Russia. It too is said to support both nuclear and conventional weapons. Since Russia seized Crimea in 2014, the Russians have begun to build up basing sites for their advanced systems there too, including the Iskanders. If Russia brings nuclear weapons into Crimea, it will spark complex political, legal, and moral problems. The world community has largely held firm in condemning Russia’s seizure of Crimea and considers Crimea to be Ukrainian territory. Should Russia bring nuclear weapons to Crimea, it will be violating the Nuclear Non-Proliferation Treaty (NPT) in a fundamental manner, for Ukraine is a non-nuclear weapon state under the NPT. Russia in this case would be behaving in a manner no better than North Korea.

**1AR—NU**

**Russia is modernizing—if they win this card is too old to be NU then its thumps the IL**

**Episkopos 21** - a national security reporter for the national interest. (Mark Episkopos, “Russia's Nuclear Modernization Shows No Signs of Stopping,” 12/22/21, https://nationalinterest.org/blog/buzz/russias-nuclear-modernization-shows-no-signs-stopping-198373)//mcu

Russia’s current level of nuclear modernization is the highest in the country’s history, according to a top defense official. "The large-scale and dedicated work […] resulted in the highest level of nuclear trifecta modernization in its entire history — 89.1%," said Defense Minister Sergey Shoigu during a Defense Ministry meeting on Tuesday.” The Strategic Rocket Forces have completed the refurbishment of the first rocket regiment of Avangard rocket systems with intercontinental ballistic missiles, armed with hypersonic gliding cruise warheads. Two more rocket regiments have been put on duty equipped with the first Yars rocket systems.” One of six new weapons unveiled by Russian president Vladimir Putin during his 2018 state-of-the-nation address, Avangard is a hypersonic boost-glide vehicle (HGV) that first entered service in late December 2019. Sources familiar with a U.S. intelligence assessment of the Avangard program told CNBC earlier that year that Russia’s armed forces are expected to procure “no more than 60 of these hypersonic weapons” due to prohibitive production costs. RS-24 Yars, also known as Topol-MR, is a Russian Intercontinental Ballistic Missile (ICBM) system introduced in the late 2000s. Yars is believed to be an advanced development of the older Topol-M ICBM, conceived in the 1980s and deployed in the years following the Soviet collapse. Yars is armed with up to six multiple independently targetable warheads (MIRVs), each reportedly carrying a yield of at least 300 kilotons. As with its Topol-M predecessor, Yars can be deployed in both road-mobile and silo-based formats. According to recent western estimates, Russia’s strategic missile forces possess around 140 mobile Yars systems, just over one dozen silo-based Yars units, sixteen mobile Topol-M systems, sixty silo-based Topol-M systems, and around forty aging Topol systems that are slated for imminent retirement. Russia’s defense industry has begun working on a new ICBM system, dubbed Kedr, which is planned to phase out the country’s current and future Yars systems starting in the early 2030s. Shoigu added that the **naval and air legs of Russia’s nuclear triad are also getting major upgrades.** The air strategic nuclear forces have been equipped with four upgraded Tu-95MS strategic missile carriers. The **Navy received another Borey-A submarine nuclear cruiser, armed with Bulava ballistic missiles**," he said. Shoigu added that Russia’s ongoing military hardware procurements are accompanied by infrastructure modernization, noting that 690 “high-tech objects were constructed” in 2021. Putin, who attended the same Defense Ministry meeting, echoed Shoigu’s positive assessment of Russia’s military modernization. "The outgoing year was extraordinary just like the previous 2020,” he said. “First and foremost, because of the ongoing coronavirus pandemic. It is of principal importance that the Armed forces completed all objectives accurately, without disruptions.”

**2AC—thumpers**

**Ukraine spurred an arms race**

**Mishra and Nolan 3-4** - Truman Center for National Policy’s Janne E. Nolan Nuclear Security Fellow, Sylvia Mishra (Sylvia Mishra, Janne E. Nolan, “The Ukraine Crisis and the Global Nuclear Order,” The Truman Center, March 4, 2022, https://www.trumancenter.org/issues-posts/the-ukraine-crisis-and-the-global-nuclear-order)//mcu

‍In launching his “special military operation” and threatening “consequences… [like] you have never seen in your entire history,” Russia’s President, Vladimir Putin, has openly engaged in nuclear saber rattling. Noted scholar Caitlin Talmadge has explained that Putin’s nuclear threat was intended as a shield to keep the West out of Russia’s conventional military operations. This textbook Russian strategy (to threaten nuclear weapons use in order to offset its conventional inferiority) is aimed at preventing the United States and NATO’s direct involvement. It also gravely undermines the global nuclear **nonproliferation** order and threatens to distort several nuclear conventions and security assurances to non-nuclear armed countries. Putin’s aggression towards Ukraine sets a dangerous precedent by abrogating a longstanding convention (The Budapest Memorandum on Security Assurances) and undermining the wider framework of security assurances and guarantees that nuclear weapons states (NWS) offer to non-nuclear weapons states (NNWS). The Nuclear Nonproliferation Treaty (NPT) represents a grand bargain between NWS and NNWS, aimed at preserving global peace and security while preventing the proliferation of weapons of mass destruction. As an NPT signatory, Russia has pledged to disavow the use of negative security assurances: not to use or threaten to use nuclear weapons against NNWS. Putin’s actions undermine the NPT and offer a clear example of bullying behavior. The theory of nuclear brinkmanship holds that states exert coercive pressure by taking steps that raise the risk of confrontation by showing effective resolve and enhancing their bargaining position, thereby coercing an opponent into making concessions. Putin’s nuclear toolbox – founded upon an ‘escalate to de-escalate’ strategy of nuclear threats and orders to put nuclear deterrent forces on alert - is classic nuclear brinkmanship aimed at coercing Ukrainian concessions and to keep the West out. Russian nuclear signaling and escalation is not new. At the height of the Crimea crisis in 2014, Russia conducted military exercises to counter nuclear strikes. As Jacek Durklace writes, an integral part of the Russian approach to conflict is nuclear arms flexing and backing up the credibility of threats with nuclear messaging (including threatening statements, bomber flights, and exercises). However, despite parallels to previous Russian actions, this evolving Ukraine crisis appears to be different and more dangerous. Moving to launch readiness signals a lowering of thresholds for use, and conducting nuclear exercises in the middle of a crisis is highly escalatory behavior. On March 1st, several Russian nuclear submarines conducted drills in the Barents Sea and units of the Strategic Missile Forces dispersed Yars road mobile intercontinental ballistic missile launchers in forests to practice secret deployment. While Russia has previously conducted nuclear exercises amidst a crisis, scholar James Acton raises an important question concerning whether these strategic systems will return to their bases or continue to be deployed. If they remain deployed, Russia is one step closer to nuclear preparedness. The use of nuclear-capable cruise missiles like Kalibr (though considered a part of Russian non-nuclear deterrence forces) also raises concerns, and the involvement of third-party actors like Belarus and its offer to host Russian nuclear weapons is further destabilizing. William Alberque commented on a less noticed change in Belarus’s constitution that would allow Belarus to host nuclear weapons on its territory for the first time since 1996, overturning efforts of the Cooperative Threat Reduction Program to denuclearize Belarus. At a time when the political divide between nuclear ‘haves’ and ‘have-nots’ is growing - especially due to the lack of progress on implementation of Article VI of the NPT (an NWS commitment towards global disarmament) - Russian actions accelerate this growing divide. NNWS are taking note of the stalling patterns of NWS and bullying behavior. As countries prepare for the upcoming NPT Review Conference, the health and longevity of the NPT will continue to be fiercely debated. The Ukraine crisis may lead to several worrying developments. The crisis **might accelerate NWS’ nuclear modernization**. Several NWS and rogue state actors like North Korea might adopt wrong lessons from the crisis and further intensify their own reliance on nuclear weapons. Several countries are likely to expand their defense spending - a trend highlighted by a recent SIPRI report, which suggested that global military expenditure was 7.2 percent higher in 2019 than it was in 2010. In a historic announcement, German Chancellor Olaf Scholz committed to spending $113 billion on defense in 2022. It will not be surprising if several other European nations rethink their own security and defense policies in the face of Russian aggression. In an already brittle security environment in Europe, security dilemmas are going to increase, further challenging the already fragile global nonproliferation order.

**Ukraine already started an arms race, there is only a risk deterrence prevents direct war**

**O’connor 3-4** - n award-winning senior writer of foreign policy at Newsweek, where he specializes in the Middle East, North Korea and other areas of international affairs and conflict. (TOM O'CONNOR, “Ukraine Conflict Risks New U.S.-Russia Arms Race, World Closer to Nuclear War” Newsweek, 3/4/22, https://www.newsweek.com/ukraine-conflict-risks-new-us-russia-arms-race-world-closer-nuclear-war-1684362)//mcu

The thunderous eruption of Europe's worst war in decades has torn asunder already fissuring relations between the world's top two nuclear powers, Russia and the United States, with nuclear threats being discussed as never before in the 21st century only days into the conflict in Ukraine. What comes next, experts and insiders fear, is an acceleration of the Cold War-era arms race that never truly ended and soon may enter a new, even more dangerous phase. "I am deeply concerned we have arrived at the most dangerous moment in our collective nuclear history since the Cuban Missile Crisis," Joan Rohlfing, president and chief operating officer of the Nuclear Threat Initiative, told Newsweek. In fact she said, "this is probably a moment as dangerous as the Cuban Missile Crisis." In the 75 years since the U.S. introduced the world to atomic warfare in the bombings of Hiroshima and Nagasaki, the standoff between U.S. and Soviet warships in the Caribbean more than half a century ago still marks one of the most fraught moments in nuclear history, bringing the two superpowers to the brink of unleashing their weapons of mass destruction against one another. NEWSWEEK NEWSLETTER SIGN-UP > Rohlfing has a long career of seeking to rein in the threat of nuclear war. Before joining the Nuclear Threat Initiative and participating in leading projects such as the establishment of the World Institute for Nuclear Security and Nuclear Security Project, Rohlfing served in senior positions at the Department of Energy and the Pentagon. And now, in response to Russian President Vladimir Putin's recent decision to raise the readiness level of his nation's nuclear triad amid deteriorating ties with the U.S. and its NATO allies, she spells out explicitly why she's concerned in this moment in history. "We are at a significantly escalated risk of nuclear use," Rohlfing said. Russia, Yars, ICBM, military, parade, February, 2022 As the conflict in Ukraine marks Europe's worst war in decades, nuclear threats are being discussed as never before in the 21st century, worrying experts and insiders of an acceleration of the Cold War-era arms race between the United States and Russia. Above, Russian personnel stand at attention as the armed forces prepare to move nuclear-capable intercontinental ballistic missiles to Moscow for a victory parade in this still from a video published February 25, a day after Russian President Vladimir Putin ordered the "special military operation" in Ukraine. RUSSIAN MINISTRY OF DEFENSE NEWSWEEK SUBSCRIPTION OFFERS > President Joe Biden has sought to downplay the likelihood of mounting U.S.-Russia tensions culminating in a nuclear exchange. Asked by a reporter Monday if the U.S. should be concerned about the possibility of a nuclear war, the president simply responded, "No." But recent reports of a new U.S.-Russia military hotline opened in Europe indicate a growing worry of the potential for direct clashes between the two powers, by design or miscalculation, as both seek to flex their strategic deterrence. Matching Russia's own nuclear actions, the U.S. has flown nuclear-capable B-52 bombers to NATO's eastern flank, a region that has been at the center of the Kremlin's enmity toward the West due to the alliance's expansion since the fall of the Soviet Union 30 years ago. Putin, who has been in power for two of those past three decades, has also overseen the collapse of the arms control architecture painstakingly, sometimes begrudgingly, built by Washington and Moscow throughout the Cold War. First, the U.S. pulled out of the 1972 Anti-Ballistic Missile Treaty (ABM) in 2002, early on in Putin's tenure and shortly after the 9/11 attacks pivoted Washington's attention away from rebuilding U.S.-Russia relations toward fighting the "War on Terror" that continues to this day. Five years later, Moscow withdrew from the Conventional Armed Forces in Europe Treaty (CFE), arguing that the level of restrictions imposed on Russia no longer made sense in the wake of the USSR-aligned Warsaw Pact's dissolution. The most recent casualty to non-proliferation efforts was the Intermediate-range Nuclear Forces Treaty (INF), scrapped by former President Donald Trump in 2019 after longstanding U.S. accusations that Russia had violated the accord with the production of a new missile that breached the 500-5,500-kilometer ban on ground-based weapons systems. Russia, for its part, argued that the U.S. was already in violation of the INF with the deployment in Eastern Europe of missile defense systems that Moscow has argued could not only neutralize the country's own firepower but also be fitted with offensive weapons. The INF's looming death only further pushed Putin to pursue the development of new nuclear-capable platforms he touted as "invincible" to existing and even prospective defenses. "They didn't listen to us, so listen to us now," Putin proclaimed during his 2018 unveiling of nuclear-capable systems such as the RS-28 Sarmat intercontinental ballistic missile, the Avangard hypersonic boost-glide vehicle, the Kh-47M2 Kinzhal hypersonic air-launched ballistic missile, the 9M730 Burevestnik nuclear-power cruise missile and, perhaps the biggest game-changer of them all, the Poseidon unmanned underwater torpedo, a weapon believed capable of producing fiery, radioactive waves across a radius of thousands of square miles. The U.S. has largely dismissed Russia's stated concerns, arguing that NATO was solely a "defensive" alliance, so the continued pursuit of Washington and its allies of state-of-the-art weapons of their own and even the continued deployment of U.S. nuclear weapons in Europe, meant no offense to Moscow. But just as the Kremlin watched with wariness at NATO's physical expansion, so too has Russia witnessed a historic rival coalition broaden its military mandate to include intervention in the Balkans and Libya. And after unrest first broke out in Ukraine eight years ago with the ousting of a Moscow-aligned government for one seeking to join the Western alliance, here too NATO took a larger role in arming and training Kyiv's security forces against a Moscow-backed separatist insurgency as Russia moved to annex the Crimean Peninsula amid an internationally disputed referendum. While Rohlfing emphasized that the U.S. and NATO's past actions in no way justified Putin's intervention last week, she acknowledged a need to reflect on how we arrived at this low point with Moscow. "At some point when we get out of this crisis, we're going to need to go back and take a careful look at how could we have done better in listening more closely to Russian concerns and addressing them rather than continuing to take actions that they perceived to be a threat to their security interests," Rohlfing said. Michael Krepon, who co-founded the Stimson Center think tank and previously served in the State Department's Arms Control and Disarmament Agency during the administration of former U.S. President Jimmy Carter, also saw missteps in the U.S. approach to European security after the fall of the Soviet Union, errors he felt were now hard to correct. "Open-ended NATO expansion was, in my view, an error in judgment, but once this door was opened, it was hard to close," Krepon told Newsweek. He called the U.S. and NATO decision to consider Georgia and Ukraine's bids to join the alliance during the Bucharest summit of 2008 a "supremely bad decision." "That said, Putin would likely have invaded even if Ukraine wasn't in the queue for NATO membership because Kyiv sought other ways to tie its future to the West," Krepon said. "But the offer of NATO membership was certainly a contributing factor." And, like Rohlfing, Krepon points to a threat beyond just nuclear weapons that could see Europe flooded with conventional weapons capable of instilling mass "terror" among the populace. He asserted that "the biggest unacknowledged arms control challenge is for conventionally-armed missiles," including ballistic weapons that are "also very fast" as well as "cheaper and they still get the job done." But he warned that "nuclear weapons delivery vehicles aren't going away." In fact, he said, "**they will be modernized**, at great expense, and hypersonics will be added as niche weapons for a subset of targets." Another expert with decades of experience working with nuclear weapons said the U.S. has also wrestled with the series of events that led us to the present crisis. "Whenever something I do doesn't work out, the first question I ask is, could I have done this differently?" Theodore A. Postol, a nuclear weapons technology expert and professor emeritus at the Massachusetts Institute of Technology told Newsweek. "Sometimes the answer is no, sometimes the answer is yes." But over the course of several U.S. administrations failing to take into account Russia's core security concerns, he argued, "there's no reflection at all." READ MORE Russia Now Controls Sky Over Ukraine, Aviators Say: 'If They Fly, They Die' Moldova Monitoring Russian Troops Already on Its Soil: 'We Are On Alert' As Ukraine Rallies Nation to Defend From Russia, Far-Right Joins the Fight Postol has worked hands-on with data relating to some of the world's deadliest systems in previous capacities with the Congressional Office of Technology Assessment and as an adviser to the Chief of Naval Operations. He recalled a time shortly after the Soviet Union's disintegration in the 1990s, when U.S. and Russian experts worked side-by-side in hopes of building a post-Cold War future for the two nations. He said it wasn't long, however, before even Russian professionals in his field were alienated by the brazen behavior of a nation that had just recently established itself as the world's sole superpower. As such, Postol said, "**there has been a serious, unabated arms race going on between Russia and the United States that has been uninterrupted by the collapse of the Soviet Union**." "What the Russians have certainly learned is that the United States is proceeding as vigorously as it can with improving its nuclear war-fighting capabilities," he added. "I think that's clear and unambiguous." While the failure of arms control treaties, now reduced to one remaining key pact, the New Strategic Arms Reduction Treaty (New START), over the past two decades is well known, one less-publicized development that proved influential in Russia's own bid for bigger, more powerful weapons was the U.S. production of a burst-height compensating super-fuze for submarine-launched warheads, something that Postol said "essentially doubled" the U.S. nuclear strike capability. The U.S. improvements help explain Moscow's emphasis on developing weapons that could not be countered, and so does Russia's own awareness of what Postol said are shortcomings in its own early warning systems, a critical capability that could mean the difference between identifying a true nuclear attack or a false alarm. While the Cuban Missile Crisis is perhaps the most potent example of nuclear brinksmanship between the U.S. and Russia, a number of precarious near-misses have been the result of miscalculations. Among the more prominent of these close-calls is the 1983 Able Archer exercise during which NATO trained for a full-scale nuclear attack against the Soviet Union, which, concerned about a potential coverup for an actual strike, put its nuclear forces on high alert. But another high-profile incident occurred in the post-Soviet era. In 1995, a joint U.S.-Norwegian team launched a scientific rocket from the Andøya Space center and Russian forces, unable to immediately distinguish the rocket from a Trident submarine-launched ballistic missile, prepared a potential retaliatory strike before it was determined that the object in question was veering away from Russian territory. Postol said that, at the time, the fact that Moscow and Washington were on relatively good terms played into Russia's calculus in not ordering a quick reaction. Given the current downfall in trust, however, he worried such an incident could bring the world even closer to nuclear destruction. "If it had occurred today, with them invading Ukraine," Postol said, "I don't think it would have resulted in an accidental Russian nuclear launch. I do not want to overstate that point, but I think it would have brought the Russian forces onto a higher state of alert." With tensions high, Postol said even the savviest Russian generals may ask themselves, "What might the Americans do?" "I think they would be very sober because they know that the Americans would be stupid beyond belief to attack them with nuclear weapons," Postol added, "but it would be somewhat dicier because of all these things that are now going on." Last month, about a week before Putin announced the beginning of hostilities in Ukraine, threatening outside powers with "such consequences that you have never experienced in your history" should they seek to intervene, Russian Security Council Deputy Secretary Mikhail Popov spoke of the difficulties of discerning a threat in the heat of the moment, especially when tensions ran so high. "Hardly anyone, except specialists, comes to realize that modern systems spot launches of missiles quite quickly but cannot identify whether these missiles carry nuclear weapons," Popov told Russian newspaper Rossiyskaya Gazeta. "That is why, any missile launch may be perceived as a nuclear strike amid the tense military and political situation." And even if Moscow and Washington are able to climb out of the rut in their relations, described by Biden as a "complete rupture," to return to strategic stability talks, Postol was skeptical that the kind of "unimaginative" approach he anticipated would do much to make the world safer. "The United States will not address fundamental problems like the danger from shortfalls in Russia's early warning system, which is an extremely dangerous source of a potential accidental nuclear war, which could lead to an accidental nuclear war and the crisis," Postol said. "And the U.S. continuous effort to increase the war-fighting capability of its nuclear forces will cause the Russians to be more and more likely to take actions to defend themselves that could make the chances of an accidental nuclear war considerably higher." US, Minuteman, III, ICBM, test, launch An Air Force Global Strike Command unarmed Minuteman III intercontinental ballistic missile launches during an operational test on August 11, 2021, at Vandenberg Space Force Base in California. The Pentagon said in March 2022 that a subsequent launch scheduled amid soaring U.S.-Russia tensions over Ukraine was postponed after Russian President Vladimir Putin put his nuclear forces on heightened alert over the crisis. MICHAEL PETERSON/SPACE LAUNCH DELTA 30 PUBLIC AFFAIRS/U.S. SPACE FORCE The view from Moscow is bleak as well. "**We are way past the phase when academics and think-tankers could legitimately invoke the 'risk' of a new arms race**," Artem Kvartalnov, a research fellow at the Moscow-based PIR Center and a member of the Germany-Russia-U.S. Young Deep Cuts Commission arms control group, told Newsweek. "The arms race has already been there since Putin presented Russia's new strategic weapon systems in 2018 and since the U.S. increased funding for many of its military programs around the same time," Kvartalnov said. "What we should fear now is potential new dimensions of this arms race." For the U.S., a country whose defense budget is larger than the next 11 nations combined, including both China and Russia, the possibilities are nearly limitless. The Pentagon has faced a number of setbacks in its own hypersonic missile program but a meeting held last month by Defense Secretary Lloyd Austin and defense industry leaders was aimed toward improving and accelerating efforts to bring to fruition an array of projects currently in the works. Kvartalnov predicted further U.S. and allied deployments in Europe, culminating in a risky remilitarization of the continent. "As the invasion of Ukraine will likely result in more NATO rather than less NATO," he said, "military posturing in Europe can reach long-forgotten levels." Some were less confident in the U.S. capability to keep up with endless military spending in the long term. "Well, I suppose if you think you could just print money in perpetuity without any consequences, we could have an arms race, but, to be quite frank, I think we're nearing bankruptcy here," Douglas Macgregor, a retired U.S. Army colonel who served under Trump as senior adviser to then-Acting Defense Secretary Christopher Miller, said in response to Newsweek's question during a panel last week. He argued that, with the U.S. debt-to-GDP ratio at upwards of 120%, "we're not healthy." "We cannot afford this major buildup that people talk about," Macgregor said. "We've wasted trillions on all sorts of bright shiny objects. There has been no strategic focus to guide any of this spending. I think we've about had it." And while he said the opportunity may be tantalizing to a number of members of Congress, he also felt "our internal affairs are going to constrain us dramatically in the near future." The situation may prove even more arduous for Russia, where an increasingly restrictive wave of global sanctions in response to Putin's intervention in Ukraine threatens to strangle Moscow's own military modernization program. But a lifeline exists that could prove further geopolitically challenging for Washington. China has sought to adopt a balanced position on the conflict in Ukraine, one that has shifted Washington's attention from its leading 21st-century rival, Beijing, to the old foe of Moscow. But the U.S. strategy of attempting to take on both powers at once has only driven them to further embrace one another's worldview and form a "comprehensive strategic partnership of coordination for the new era," a bond that promises a new kind of bilateral relationship beyond that of Cold War-era blocs and alliances. The result thus far has been an unprecedented level of cooperation between Beijing and Moscow, one that includes not only trade pacts capable of dodging Western sanctions but also joint military-technical endeavors that both Putin and Chinese counterpart Xi Jinping pledged to continue during their summit last month. Beijing has never been a party to the arms control treaties signed between Moscow and Washington, and Chinese officials have expressed vehement resistance to joining such measures, much to U.S. concern. And while China's far smaller arsenal has shown growth both in size and sophistication in recent years, Beijing, unlike the two leading nuclear powers, maintains a "no-first-use" policy officially precluding that the People's Republic would be the first to introduce a nuclear strike in a non-nuclear conflict. "We oppose the use of nuclear weapons, and what we see is that the nuclear war will never be won by any parties," Liu Pengyu, spokesperson for the Chinese embassy in Washington, told Newsweek during a press briefing Monday. "We oppose any nuclear wars." But even Beijing has expressed alarm at the level to which Russia and the U.S. were responding to their frictions with nuclear-related steps. "**There are nuclear moves,** I don't think this is the proper way to solve the problem," Liu said. "Now, it's to de-escalate the situation." And while Beijing has offered to play a diplomatic role to defuse the crisis in Ukraine itself, some in the U.S. have called for dramatic military moves, including potential airstrikes against Russian convoys or imposing a no-fly zone over Ukraine. Such moves have been dismissed so far by U.S. officials, but NATO ally Turkey moved to potentially implement an effective blockade of Russian warships attempting to enter the Black Sea by activating the Montreux Convention, a power rooted in longstanding tensions that pushed Ankara to join NATO in the first place. Given the disintegration of protective measures and the swelling of bad blood between Russia and the U.S., which collectively hold up to 90% of the world's nuclear weapons, Beatrice Fihn, executive director of the 2017 Nobel Peace Prize-winning International Campaign to Abolish Nuclear Weapons, told Newsweek she was "very concerned" about dark days to come for arms control. "The last ten years, we've seen a withdrawal of the arms control agreement, an undermining of international law and multilateralism **and an increase in nuclear modernization and spending**," Finh said. "That's why we're in such a dangerous situation right now." "We need to urgently address the situation in Ukraine to protect civilians, and then double down on diplomacy, international law and arms control and disarmament treaties to prevent this from happening again," she added. With U.S.-Russia diplomacy at the wayside, however, there are lingering concerns over whether the world will get a second chance. A major confrontation between U.S. and Russian forces has been avoided for a century since Washington and its allies unsuccessfully intervened against Russian communist forces who ultimately went on to establish the Soviet Union in 1922. But 100 years later, another outbreak of war in Europe indicates the dawn of a brave new world where past safeguards may no longer be enough. "Fortunately, there is no direct war between Russia and the United States at this point," Kvartalnov told Newsweek. "However, recent developments in Ukraine show that military dynamics in Europe have become unpredictable. " "A war in Europe that nobody could envision has become reality," he added. "Regrettably, we are entering a world where nothing can be ruled out—including direct war."

**2AC—Strat Stab False**

**Strategic stability relies on outdated mirror imaging theory**

**Payne and Dodge 21** - Payne served as the Deputy Assistant Secretary of Defense for Forces Policy and as a Senior Advisor to the Office of the Secretary of Defense. He is the co-founder for the National Institute for Public Policy and also has acted as a commissioner on the bipartisan Congressional Commission on the Strategic Posture of the United States. For DSS, Dr. Payne teaches advanced courses on nuclear deterrence and strategy. Doge is a research scholar at the National Institute for Public Policy. Her work focuses on US nuclear weapons and defense policy, deterrence and assurance and arms control. A graduate of the DSS program in 2011, she is well qualified to teach on the modern issues of nuclear weapons possession. (Keith B. Payne & Michaela Dodge, “The Strategic Stability Dialogue: Think Before You Speak,” Real clear Defense, July 09, 2021, <https://www.realcleardefense.com/articles/2021/07/08/the_strategic_stability_dialogue_think_before_you_speak_784794.html)//mcu>

This stable deterrence paradigm and related explanation of the arms race became the basis for much U.S. arms control policy.[13] Together, they led to U.S. arms control efforts being about codifying “strategic stability” by attempting to control technical parameters of weapon systems and their (largely) quantitative restrictions.[14] As one commentator observed, “Stability became an essential metric for evaluating nuclear forces, particularly regarding the wisdom of new nuclear capabilities and deployment options. Equally important, stability became the new rationale for U.S.-Soviet nuclear arms control.”[15] The purpose of arms control was to codify the balance of terror and thereby stop the action-reaction arms race cycle; U.S. arms control policy came to be geared to that end.[16] The pursuit of “stability” meant that the United States should avoid weapon programs that might undermine the Soviet retaliatory deterrent threat to U.S. society and thus avoid compelling the Soviet Union to react to U.S. actions in a new cycle of the arms race. Such U.S. restraint would lead to an “inaction-inaction” cycle that would end the arms race and possibly initiate a “peace race.”[17] Arms control could advance this happy outcome by limiting or prohibiting destabilizing systems and thereby slow down if not stop the purported action-reaction dynamic underlying the arms race. The Cold War stability paradigm became a governing basis for U.S. strategic arms control goals and policy: The belief that strategic systems defined as destabilizing or unnecessary per the Cold War stability paradigm were the cause of the arms race and thus should be limited or prohibited via arms control was broadly applied to U.S. strategic forces, but particularly to strategic missile defense and ICBMs carrying multiple warheads (MIRVs). Secretary of Defense Caspar Weinberger summarized this dynamic as follows: “The primary U.S. goal in negotiations was to enshrine forever the strategic doctrine of mutual vulnerability. By putting caps on each side’s strategic nuclear arsenals and foregoing the deployment of all but the most limited anti-ballistic missile systems, strategic stability was to be enhanced.”[18] An Inconvenient Truth This approach to arms control follows from the underlying Cold War stability paradigm and its mirror-imaging presumption. Assuming opponents’ decision making to be based on known and shared parameters is the basis for the corresponding beliefs that the conditions that constitute stable deterrence are fully understood and the functioning of deterrence is so predictable that strategic forces can be categorized as stabilizing or destabilizing. **This mirror imaging presumption was highly questionable during the Cold War**;[19] **it is even more so now because the contemporary international threat environment is far more diverse and unpredictable.**[20] Some contemporary adversaries may well not share the U.S. definition of reasonable, value system or decision-making process. In particular, they may not share U.S. perceptions of nuclear risk or consider U.S. balance of terror-style threats sufficiently credible to be deterred by them.[21] Indeed, their goals and decision making may drive behavior that **recklessly threatens U.S. and allied security** in ways deemed “unthinkable” per the Cold War stability paradigm. The United States now confronts a multi-dimensional nuclear environment and a diverse set of threats. Most notably, it must contend with new adversaries armed with sophisticated missile and nuclear capabilities**, revanchist powers** willing to employ coercive **nuclear first-use threats to achieve their revisionist geopolitical goals**,[22] and countries with worldviews fundamentally different from, and opposed to those of the United States and its allies. These states see the United States as the impediment to their revisionist geopolitical goals. Indeed, the presumptions underlying the Cold War stability paradigm are now so divorced from the realities of the international environment that it can no longer be considered a prudent guide for U.S. deterrence or arms control considerations. Thomas Schelling observed in 2013, “Now we are in a different world, a world so much more complex than the world of the East-West Cold War. It took 12 years to begin to comprehend the ‘stability’ issue after 1945, but once we got it we thought we understood it. Now the world is so much changed, so much more complicated, so multivariate, so unpredictable, involving so many nations and cultures and languages in nuclear relationships, many of them asymmetric, that it is even difficult to know how many meanings there are for ‘strategic stability,’ or how many different kinds of such stability there may be among so many different international relationships, or what ‘stable deterrence’ is supposed to deter in a world of proliferated weapons.”[23] As Schelling suggested, relatively new post-Cold War conditions require a new understanding of deterrence stability—an understanding different from that of the Cold War paradigm that has for decades dominated U.S. arms control policies and much public commentary—if not all actual U.S. nuclear policy. A new understanding of deterrence stability must take into account the great variability and diversity in adversaries’ beliefs, perceptions, and goals. Whereas the Cold War stability paradigm assumed similarly reasonable Russian decision-makers with essentially defensive deterrence goals, at least some contemporary opponents appear to see nuclear weapons as tools of coercion, and the United States may have only modest understanding of the diverse decision-making processes and value systems in “key parts of the world.”[24] Given the great diversity of opponents, and the types of capabilities that may be necessary to deter them, the rigid Cold War categorization of forces derived from bipolar **mirror imaging no longer makes sense, if it ever did**. Forces necessary for deterrence may vary greatly depending on the opponent and context. In particular, technical characteristics alone cannot be the basis for declaring a capability to be stabilizing or destabilizing—understanding opponents’ goals and perceptions also is key, particularly the purposes they envisage for their nuclear arsenals. Are those purposes essentially defensive, i.e., for the preservation of an existing order and boundaries? Or, are they essentially offensive, i.e., for the destruction of an existing order and boundaries? The same types of nuclear weapons may be put into service for either purpose, and correspondingly, the same types of weapons may be stabilizing or highly destabilizing depending on the intended purpose. This reality upends the apolitical stabilizing vs destabilizing categorization of forces derived from the Cold War stability paradigm.

**Strategic stability is fake---logic and empirics prevent escalation**

**Kroenig 18** - member of the Council on Foreign Relations and holds an MA and PhD in political science from the University of California at Berkeley; served in several positions in the U.S. Department of Defense and the intelligence community in the Bush, Obama, and Trump administration; he Director of the Global Strategy Initiative and Deputy Director of the Scowcroft Center for Strategy and Security at the Atlantic Council. He has previously worked as the Stanton Nuclear Security Fellow at the Council on Foreign Relations, and as a research fellow at the Belfer Center for Science and International Security at Harvard University, and the Center for International Security and Cooperation at Stanford University. (Matthew Kroenig, “The Logic of American Nuclear Strategy: Why Strategic Superiority Matters,” Oxford University Press, 2018, pg. 142) WMK

Strategic Stability 137 The fear of possible retaliation following a US nuclear first strike, therefore, is **not a good reason** why the United States should not maintain a nuclear **advantage over rivals**. Indeed, the principal fear in this scenario is that a disarming strike might not work. The concern, therefore, is one of **insufficient US superiority, not too much.** In sum, a nuclear balance of power that provides the United States with a firststrike capability may very well be destabilizing**, but it is instability in America’s favor** and, therefore, not a good reason why Washington should not pursue the capability. A Nuclear Inferior Adversary Strikes First The second, and more common, argument as to why nuclear superiority might be destabilizing is because the state in the position of nuclear inferiority (in this case, America’s adversaries) may feel “use ’em or lose ’em” (UELE) pressures, but this argument also **withers under interrogation**.26 According to strategic stability theorists, a US nuclear advantage increases the danger of nuclear war because the inferior opponent may fear that its nuclear arsenal is vulnerable to a first strike. Rather, than wait for the adversary (in this case the United States) to move first and wipe out, or seriously blunt, its strategic forces, the argument goes, the inferior state may decide to intentionally launch a nuclear war early in a crisis in order to avoid suffering a disarming first strike. This is the logic most often invoked by strategic stability theorists when they claim that US nuclear advantages are destabilizing. This is also the precise problem identified and inspired by Wohlstetter’s basing studies. Use ’em or lose ’em enjoys a certain superficial plausibility, but, upon closer inspection, there are two fundamental reasons **the logic simply does not hold up.** First, it ignores the fact that the superior state **retains a healthy ability to retaliate**. So, even if the inferior state is worried about having its nuclear weapons eliminated in a first strike, the **decision to launch its nuclear weapons first as a coping mechanism** would be a decision to intentionally **launch a nuclear war** against a state **with at least a secure, second-strike capability**. This means that even if the inferior state launches its nuclear weapons first, it will be virtually guaranteed to suffer **devastating nuclear retaliation**. Moreover, given that it is in a situation of extreme inferiority (so extreme that it might even be vulnerable to a preemptive nuclear strike), this would mean intentionally launching a devastating nuclear war that **will likely turn out much worse for itself then for its opponent**. It would simply be irrational for a state to intentionally launch a nuclear war against a state with an assured retaliatory capability. Let us consider a concrete example. The United States maintains nuclear superiority over China, as we have seen in previous chapters. Strategic stability 138 The Disadvantages of Nuclear Advantages? theorists want us to believe that if the United States takes additional steps to further **enhance its superiority**, then China would face even greater temptations to launch a nuclear first strike against the US homeland in the event of a serious crisis. In other words, strategic stability theorists hold that China would be so worried about losing a devastating nuclear war against United States that it would intentionally choose to start a devastating nuclear war against the United States. **The argument does not make sense**. But academic deterrence theorists and other critics of American nuclear strategy try to have it both ways. They attempt to argue that a second-strike capability is **sufficient to deter any nuclear-armed state from launching a nuclear attack**. Therefore, they advocate that the United States need not build a nuclear force that goes beyond this requirement because a second-strike capability is more than enough. But, then they warn that if Washington strengthens its nuclear forces too much, other countries will be tempted to launch a nuclear attack against a United States armed with a second-strike capability. So, which is it? Does a second-strike capability reliably deter intentional nuclear attack, or not? If not, then they cannot maintain that a second-strike capability is more than enough for deterrence. If so, they cannot claim that a second-strike capabilityplus will provoke a nuclear attack. Some readers may retort that my argument also attempts to have it both ways too, but they would be mistaken. As the attentive reader will recall, this book has consistently argued that a second-strike capability is sufficient to deter an intentional nuclear attack and that nuclear superiority contributes to a state’s national security goals in other ways: limiting the damage of nuclear war, deterring lowerlevel disputes, and enhancing bargaining leverage in high-stakes crises. In sum, the argument of this book is internally consistent, but the claims of strategic stability theorists contain a logical contradiction. Furthermore, UELE arguments are unpersuasive for a second reason. These arguments overlook the fact that the inferior **state has a more attractive option** at each stage of the crisis: **backing down and living to fight another day**. A state in a position of inferiority involved in a high-stakes crisis always has a choice between three options: (1) intentionally launching a nuclear first strike in a devastating nuclear war that it will almost **certainly lose;** (2) playing brinkmanship, escalating the crisis, and raising the risk of nuclear war in a contest that it is also likely to lose; or (3)  **simply de-escalating the crisis and avoiding any further danger**. Faced with this menu, option 1 is by far the least attractive, but this is precisely the option we must believe leaders will purposely choose in order for the UELE logic to hold. This is untenable. Indeed, much of nuclear deterrence theory and strategy as it has developed over the past 70 years is based on the premise that **option 1 is simply unacceptable**. Contrary to the claims of strategic stability theorists, therefore, UELE **does not pose a problem to strategic stability**. Strategic Stability 139 To be sure, if a nuclear war were preordained to occur with 100% certainty, then an inferior state might have good reason to go first, but the risk of nuclear war is never certain. Indeed, the risk of nuclear war is in the control of both states. To avoid any risk of nuclear conflict, **all they must do is capitulate**. While an unattractive option, it is **more desirable than intentionally launching a devastating nuclear war** that it is bound to lose. Indeed, even the highly stylized game theoretic model in chapter 1, which relies on a spontaneous risk of nuclear war, assumes that states can avoid any further risk of catastrophe by submitting at any stage of the crisis. There are five possible counterarguments to these claims, but none of them are persuasive. First, one could argue that the above case against strategic stability theory rests on states making rational calculations, but the leadership of future US adversaries might not be fully rational. Kim Jong Un in North Korea, for example, may be irrational or extremely risk acceptant and may be willing to run great risks of, or even to intentionally fight, a nuclear war. This is possible. But, if this is the case, then, we should not expect strategic stability through mutual vulnerability and nuclear parity to discourage him from starting a nuclear war either. Surely, the subtleties of strategic stability theory would be lost on a lunatic. Moreover, even madmen and excessive risk takers have some understanding of power. If anything, a future reckless leader should be even more willing to launch a catastrophic nuclear war from a position of parity (i.e., a situation of so-called strategic stability), than from a position of inferiority. Second, one might counter that states will refrain from UELE in most circumstances, but in truly dire straits, when their backs are against the wall and they have nothing left to lose, then we cannot rule out the possibility of inferior states lashing out with nuclear strikes. For example, they might claim, a state on the verge of being overrun in a conventional invasion might use nuclear weapons rather than lose everything.27 Some analysts believe that Russia or North Korea, for example, may conduct limited nuclear “de-escalation” strikes rather than lose a conventional war against the United States.28 This is a compelling argument, but note that this is not an argument about UELE, or about the nuclear balance of power. Rather, this is an argument about the dangers of putting an opponent’s back against the wall in international politics. This is a cardinal rule of diplomacy, but it is not a reason to avoid military nuclear advantages. Indeed, if anything (and as above), a country in a dire position would likely be even more tempted to gamble for resurrection through nuclear use from a position of parity, rather than from a position of severe inferiority. Once again, the idea that US nuclear superiority somehow increases the risk of nuclear war against the United States does not add up. Third, and related, my colleagues have argued that it is possible that a US adversary might pursue a limited nuclear war strategy with a vulnerable nuclear 140 The Disadvantages of Nuclear Advantages? force. Rather than lose the opportunity to “escalate to de-escalate,” therefore, the state may conduct a limited nuclear strike early in a crisis to shock the United States into suing for peace, before the United States succeeds in wiping out its nuclear forces. This would be a true UELE situation, they maintain, because the enemy is incentivized to escalate early precisely in order avoid losing the option. This argument, however, solves one logical contradiction only to create another. Theories of limited nuclear war do not maintain that limited nuclear strikes are decisive in and of themselves. Rather, they have coercive power because they signal the threat of more devastation to come. It is one of the highest rungs on brinkmanship’s escalation ladder. If a state is vulnerable to a first strike, however, then **it cannot credibly threaten that there is more devastation to come**. The United States would have **little incentive to sue for peace** in response to a limited strike from such a state. **It could simply retaliate** (with the full moral and legal authority that would follow victimization in a nuclear attack) and disarm the enemy’s **remaining nuclear force**s. Again, this state would be better off simply backing down than inviting the disarming nuclear strike it was trying to ward off. If, on the other hand, the state has a survivable force, then it would not have needed to escalate early for fear of UELE in the first place. The only possible exception to this logic would be for a state with a vulnerable force, following a limited nuclear war strategy, that believes that Washington’s stake in the crisis is so insignificant, that the United States would prefer to back down after suffering a limited strike, rather than follow through with a disarming retaliatory strike of its own. This would be one rational pathway to nuclear escalation due to UELE, but it is a bit of a stretch. A number of unusual conditions must be necessary to make this scenario possible. It is certainly not the broad class of instability problems often portrayed by strategic stability theorists. Moreover, it is a problem that can be addressed. In these cases, Washington can simply take additional steps to demonstrate its stake in these scenarios and to disabuse adversaries of the notion that Washington would simply buckle after a limited nuclear attack from a state with a vulnerable nuclear force. Fourth, one Washington DC-based colleague has argued that the theory of this book itself provides a reason for superiority to undermine stability. He argued that a state in an inferior position may conduct a massive counterforce nuclear strike on the United States in order to vault itself into the superior position and then use its newfound superiority to deter US retaliation. This is certainly an interesting idea. But it would again require us to believe that the state would intentionally launch a massive nuclear war against a state with a secondstrike capability. This is a notion that is contrary to every major theory of nuclear deterrence, including strategic stability theory itself. In addition, this argument would have to maintain that this hard-to-fathom scenario would be more likely if the United States enjoys superiority. But, if anything, an enemy attempt to Strategic Stability 141 conduct a nuclear first strike and then “deter our deterrent” should be more attractive to an enemy in a position of parity than one in an inferior position.29 Fifth, and finally, some might object that UELE does not cause leaders to intentionally launch nuclear war, but rather, in a bid to ensure the survivability of their arsenals, they might be forced to take steps to ensure, should the need arise, that they can use them before they are wiped out. They might be tempted, therefore, to adopt launch on warning nuclear postures, put their nuclear forces on hair-trigger alerts in a crisis, or delegate nuclear launch authority to low-level commanders. While these steps might be logical to ensure the survivability of the force, they also might make it harder for national leadership to control exactly when and how nuclear weapons are used and, therefore, increase the risk of accidental or inadvertent nuclear exchange. In other words, this line of argument essentially holds that inferior states will be more willing to run risks of nuclear war in serious crises. Note, however, that this logic runs exactly counter to the expectation of the superiority-brinkmanship synthesis theory. The central argument of this book maintains that inferior states **will be much more cautious in games of brinkmanship**. Theoretically, the argument of this book demonstrates that there is good reason why inferior states should **be less willing to run nuclear risks**—because they will suffer **disproportionality should things escalate**. Which perspective is correct? To some degree, this is a debate that cannot be definitively settled in the empirical realm. We therefore finish this chapter with a consideration of the empirical record. Strategic Stability: The Evidence If the UELE argument from strategic stability theory is correct, then we should expect that nuclear inferior states will intentionally launch nuclear wars against states with superior nuclear arsenals. We should also expect that inferior states will engage in risky behavior in high-stakes crises to ensure that their nuclear weapons can be launched before they are destroyed. If, on the other hand, the argument of this book is correct, then we should expect that nuclear inferior states should never intentionally launch nuclear wars and they should be hesitant to run risks of nuclear war against nuclear superior adversaries. Turning back to the empirical record reviewed in the first half of the book, we see that nuclear inferior states have **frequently backed down in high-stakes crises** with nuclear superior opponents. Nuclear inferior states have placed forces on **alert in crises** and have otherwise run risks of nuclear war, but they have been less, not more, **likely to do so than their superior opponents**. Nuclear inferior states have never issued a compellent threat against a nuclear superior opponent. 142 The Disadvantages of Nuclear Advantages? And nuclear inferior states have never intentionally launched a nuclear war against a superior opponent due to UELE fears or for any other reason. It is certainly possible that some future leader may intentionally launch nuclear weapons in order to avoid the risk that they will be destroyed in a nuclear attack. But logic and over 70 years of evidence give us strong reason to be **skeptical that this is a likely outcome.**

**1AR—Strat Stab False**

**“Strategic stability” doesn’t exist to Russia its outdated jargon to soothe the west**

**Payne and Dodge 21** - Payne served as the Deputy Assistant Secretary of Defense for Forces Policy and as a Senior Advisor to the Office of the Secretary of Defense. He is the co-founder for the National Institute for Public Policy and also has acted as a commissioner on the bipartisan Congressional Commission on the Strategic Posture of the United States. For DSS, Dr. Payne teaches advanced courses on nuclear deterrence and strategy. Doge is a research scholar at the National Institute for Public Policy. Her work focuses on US nuclear weapons and defense policy, deterrence and assurance and arms control. A graduate of the DSS program in 2011, she is well qualified to teach on the modern issues of nuclear weapons possession. (Keith B. Payne & Michaela Dodge, “The Strategic Stability Dialogue: Think Before You Speak,” Real clear Defense, July 09, 2021, <https://www.realcleardefense.com/articles/2021/07/08/the_strategic_stability_dialogue_think_before_you_speak_784794.html)//mcu>

To risk understatement, there has been a paucity of official thinking, military or civilian, devoted to this subject for decades—government interest appeared to dwindle with the end of the Cold War and the rise of the terrorist threat.[3] While this lack of attention has now come to an end, Cold War thought and jargon about deterrence stability continue to abound in much Western thinking and most public commentary. Yet, that thought and jargon provide dubious useful guidance at this point, particularly now that Moscow seems to envisage nuclear first-use threats and possible limited nuclear first use as a means for advancing Russia’s expansionist geopolitical goals—a notion wholly contrary to any Western conceptualization of deterrence “stability.” It is important to recognize that Russia’s and China’s rhetorical commitments to the phrase “strategic stability” create images in Western minds of defensive, non-aggressive intentions—given the traditional meaning of those words in Western thinking and commentary. But a non-aggressive **conception of “strategic stability” does not comport with Russia’s or China’s expressed geopolitical goals, doctrine or force deployments**. Their public lip service to the phrase appears to be hollow virtue-signaling designed only to **soothe Western** audiences. Given the character of the post-Cold War threat environment, and particularly apparent Russian views regarding the first use of nuclear weapons, the still-prominent U.S. Cold War stability paradigm and its typology of stabilizing vs destabilizing forces offer little useful guidance for meeting today’s challenging deterrence realities or guiding U.S. arms control goals.

**2020 DoS study proves “strategic stability” is a dangerous concept—doesn’t assume Russia’s squo revisionist goals**

**Payne and Dodge 21** - Payne served as the Deputy Assistant Secretary of Defense for Forces Policy and as a Senior Advisor to the Office of the Secretary of Defense. He is the co-founder for the National Institute for Public Policy and also has acted as a commissioner on the bipartisan Congressional Commission on the Strategic Posture of the United States. For DSS, Dr. Payne teaches advanced courses on nuclear deterrence and strategy. Doge is a research scholar at the National Institute for Public Policy. Her work focuses on US nuclear weapons and defense policy, deterrence and assurance and arms control. A graduate of the DSS program in 2011, she is well qualified to teach on the modern issues of nuclear weapons possession. (Keith B. Payne & Michaela Dodge, “The Strategic Stability Dialogue: Think Before You Speak,” Real clear Defense, July 09, 2021, <https://www.realcleardefense.com/articles/2021/07/08/the_strategic_stability_dialogue_think_before_you_speak_784794.html)//mcu>

A 2020 study by the U.S. State Department captures this contemporary Russian dynamic: “Russia seeks to restore its sphere of influence, both in the countries of its so-called ‘near-abroad’ (e.g., Ukraine and Georgia) and by acquiring client states farther afield (e.g., Syria) through the use of blatant military aggression, proxy forces, political and military subversion….The Kremlin is also notably risk-tolerant in its policy choices, not shying away from reckless gambles and extravagant provocations…”[25] Presuming that opponents will predictably share U.S. definitions of what constitutes reasonable goals, cost, and risk—the basic mirror imaging-methodology of the Cold War stability paradigm—**may now be quite dangerous**. Adversaries’ reasoning may not resemble U.S. calculations, goals, and decision-making whatsoever. This certainly is not to say that they are irrational, but that their perceptions, norms and understanding of what constitutes reasonable behavior and their calculation of risk vs gain can be fundamentally different from American norms and expectations. Opponents’ contemporary use of coercive nuclear first-use threats to advance revisionist geopolitical goals certainly reflects behavior that **the Cold War deterrence paradigm simply dismisses as impossible for any rational leadership**. The contemporary reality of those goals and threats demolishes the mirror-imaging-derived Cold War categorization of systems as “stabilizing” or “destabilizing,” and correspondingly, the basic Cold War notion that arms control should be about focusing on those systems that the Cold War stability paradigm defines as “destabilizing.”

**AT: Prolif**

**Prolif is stabilizing---reduces risk of conflcits and extended deterrence is more escalatory. Their ev is superpower propaganda**

**McMaken 22 —** Ryan McMaken is a senior editor at the Mises Institute. Ryan Mcmaken, "Proliferation Isn't the Problem. Legacy Nuclear Powers Again Threaten the Globe.," Mises Institute, 03-05-2022, https://mises.org/wire/proliferation-isnt-problem-legacy-nuclear-powers-again-threaten-globe, accessed 7-8-2022, WMK

It is not surprising that established nuclear powers like the United States and Russia / the Soviet Union have long claimed that nuclear proliferation must be stopped.

From a cynical point of view, it's **easy to see why established superpowers would say this**. States that already have nuclear arms naturally **want to enjoy the benefits** of having far more destructive military power than other states. Put another way: powerful states prefer the centralization of power over the diffusion of power. If other potential rivals gain access to nuclear weapons, this could limit what a legacy nuclear power can do in the international sphere. For example, it's easy to see that that United States has not attempted regime change in any nuclear power, while nonnuclear states are sitting ducks for US regime change plans. The same applies to Russia, and it is a virtually sure bet that Russia would not have invaded Ukraine at all had Ukraine not given up its nuclear arsenal in 1994.

But, of course, nuclear states tend to downplay the cynical reasons and instead state a variety of other reasons as to why proliferation is a bad thing. They say that nuclear proliferation will mean terrorists will use nuclear weapons. They say that only today's nuclear powers can be trusted with the security of nuclear weapons and that all other countries are run by madmen that would use nuclear weapons at the slightest provocation.

This narrative been tremendously successful in shaping public opinion, and it's a safe bet that a large portion of the US voting population opposes nuclear proliferation on these grounds. American voters have even shown widespread support for fighting numerous wars—such as wars against Iran and Iraq—to prevent the acquisition of "weapons of mass destruction."

But among those who **actually** study nuclear diplomacy and **proliferation**, some scholars have **never found the antiproliferation alarmism quite convincing**. Rather, some have found that proliferation **would actually act to restrain existing large nuclear-armed states** from reckless and bloody wars such as those the US pursued in Iraq and the current war in Ukraine.

The Proliferationist View

Is was accepted as nearly indisputable in the United States after the Second World War that no other nation must ever be allowed to possess nuclear arms. Of course, as time went on, several other states did obtain these arms. Proliferation began with the Soviet Union in 1949 and from there expanded to France and the United Kingdom in 1952 and 1960, respectively. China secured its own arsenal in 1964, and Israel is believed to have done the same sometime during the 1960s or 1970s.

By then, the US-led antiproliferation movement was in full swing, but this did not end proliferation. India secured its own arsenal in 1974,, and Pakistan followed suit in 1998. The most recent state to join the nuclear club is North Korea, with an arsenal that dates to 2006.

Some states have voluntarily given up their arsenals—i.e., Ukraine, Kazakhstan, and Belarus—and others—such as South Africa and Sweden—have halted nearly mature nuclear programs.

But as proliferation continued **and major wars did not result**, some scholars began to **doubt that proliferation significantly increases the odds of nuclear conflict**. In fact, the opposite may be true: **proliferation may limit conflict**.

Perhaps the first influential scholar to seriously question the antiproliferation position was Kenneth Waltz. In a 1981 paper, "The Spread of Nuclear Weapons: More May Be Better," Waltz suggested that proliferation is inevitable **yet not as dangerous** as many contend. As summarized by Henry Sokolski:

In 1981, Kenneth Waltz popularized French and American finite deterrence thinking of the late-1950s by asking whether or not nuclear weapons in more hands might be better. His answer was yes. As nuclear weapons spread, he argued, **adversaries would view war as being self-defeating**, and **peace would become more certain**.1

Or, as George Perkovich put it, Waltz "has been the most illustrious proponent" of the view that "the one major benefit of nuclear proliferation conceivably would be to **create deterrence relationships** that lower or **eliminate the risk of war** between a certain set of adversaries."2

Waltz was not alone. In more recent decades, Harvey Sapolsky has concluded that nuclear nonproliferation can **actually expand the risk of nuclear war** by **expanding US nuclear guarantees for an increasing number of states**. That is, the US has—in the name of countering proliferation—pledged to fight nuclear wars to defend nations in every corner of the globe. This "extended deterrence" has the potential to tragically **turn regional conflicts into global nuclear ones:**

I fear … we have more to fear as a nation from the costs of extended deterrence than **from the need to deter additional nuclear-armed enemies** …3

Moreover, Sapolsky notes the nonproliferation effort has not actually stopped proliferation, with India, Israel, Pakistan, and North Korea all having become nuclear-armed states since the implementation of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1970. The fact these new nuclear states have not engaged in nuclear war cannot be attributed to the existence of a nonproliferation treaty, but to the realities of nuclear deterrence as described by Waltz—and by Bertrand Lemennicier in his game theory–based analysis "Nuclear Weapons: Proliferation or Monopoly?"4

The benefits of deterrence also factor into John Mearsheimer's writings in favor of limited proliferation, most notably his argument that Ukraine **would have benefited from maintaining its own nuclear arsenal** in the wake of the collapse of the Soviet Union.5

Sapolsky concludes that, for a variety of reasons, "not many nations will seek to acquire nuclear weapons," **even in the absence of a nonproliferation regime**.6 He goes on to note, rather, that "the biggest obstacle to getting beyond the NPT is the fear of terrorists using a stolen or otherwise ne­fariously obtained nuclear weapon to blackmail or de­stroy civilization."7

John Mueller has written numerous books and articles on this fear.8 Mueller has explained that states**—even rogue ones**—have **no motivation to transfer the control of nuclear weapons** to those outside the state's control. One problem a rogue dictator or oligarch faces is that "**there would be too much risk**—even for a country led by extremists—that the ultimate source of the weapon would be discovered." Muller notes an even greater danger:

There is a very considerable danger to the donor that the bomb (and its source) would be dis­covered before delivery, or **that it would be exploded** in a manner and on a target the donor would not ap­prove of—including **on the donor itself.** Another con­cern would be that the terrorist group might be infil­trated by foreign intelligence.9

And finally, **there are no known cases of "loose nukes**," even in the wake of the Soviet Union's collapse:

A careful assessment conducted by the Center for Nonproliferation Studies has concluded that it is unlikely that **any of those devices have been lost** and that, regardless, their effectiveness would be very low or even nonexistent because they (like all nu­clear weapons) **require continual maintenance**. Even some of those people most alarmed by the prospect of atomic terrorism have concluded, "It is probably true that there are no 'loose nukes,' transportable nuclear weapons missing from their proper storage locations and available for purchase in some way."10

**No nuke prolif – too expensive, too difficult, and no one cares**

**Mueller 18** (John Mueller – senior fellow at the Cato Institute, “Nuclear Weapons Don’t Matter”, CATO Institute, 15 October 2018, <https://www.cato.org/commentary/nuclear-weapons-dont-matter>, MG)

\*edited for ableist language

HOW ABOUT PROLIFERATION AND TERRORISM?

Great powers are one thing, some might say, but rogue states or terrorist groups are another. If they go nuclear, it’s game over — which is why any further proliferation must be prevented by all possible measures, up to and including war.

That logic might seem plausible at first, but it **breaks down on close examination**. Not only has the world already survived the acquisition of nuclear weapons by some of the [~~craziest~~] mass murderers in history (Stalin and Mao), but proliferation has **slowed down** rather than sped up over time. Dozens of technologically sophisticated countries have considered obtaining nuclear arsenals, but very few have done so. This is because nuclear weapons turn out to be **difficult and expensive** to acquire and strategically **provocative to possess**.

They have not even proved to enhance status much, as many expected they would. Pakistan and Russia may garner more attention today than they would without nukes, but would Japan’s prestige be increased if it became nuclear? Did China’s status improve when it went nuclear — or when its economy grew? And would anybody really care (or even notice) if the current British or French nuclear arsenal was doubled or halved?

Alarmists have misjudged not only the pace of proliferation but also its effects. Proliferation is incredibly dangerous and necessary to prevent, we are told, because going nuclear would supposedly empower rogue states and lead them to dominate their region. The details of how this domination would happen are rarely discussed, but the general idea seems to be that once a country has nuclear weapons, it can use them to threaten others and get its way, with nonnuclear countries deferring or paying ransom to the local bully out of fear.

Except, of course, that in three‐​quarters of a century, the United States has **never been able to get anything close to that obedience** from anybody, even when it had a nuclear monopoly. So why should it be true for, say, Iran or North Korea? It is far more likely that a nuclear rogue’s threats would cause its rivals to **join together against the provocateur** — just as countries around the Persian Gulf responded to Saddam’s invasion of Kuwait by closing ranks to oppose, rather than acquiescing in, his effort at domination.

**Statistical modelling proves no nuke prolif impact**

**Cohen 16** (Michael D. Cohen PhD - convenor of the National Security College’s PhD program and Senior Lecturer at the Crawford School of Public Policy, “How nuclear proliferation causes conflict: the case for optimistic pessimism”, The Nonproliferation Review, 2016, <https://www.tandfonline.com/doi/abs/10.1080/10736700.2016.1256541>, MG)

University of Pennsylvania’s Michael Horowitz conducted a statistical analysis and found that the probability of new nuclear states reciprocating disputes quickly increases and then **decreases over time.**

The probability that a nuclear state will reciprocate a dispute with a non-nuclear state drops from .53 one year after developing nuclear weapons to .23 in year 56. Two new nuclear powers are 67 percent more likely to reciprocate a dispute than two average non-nuclear states. Two experienced nuclear powers are 65 percent less likely to reciprocate than two average non-nuclear states. The probability of dispute reciprocation between an experienced and new nuclear power is 26 percent greater than two non-nuclear states, and the probability of a very experienced state and a somewhat experienced state reciprocating is 42 percent less than two non-nuclear states.86

University of California-San Diego’s Erik Gartzke conducted a similar statistical test when the dependent variable was dispute initiation rather than reciprocation and found similarly robust results.87 Gartzke found that, while the overall effect of nuclear proliferation on conflict propensity is neutral, there is variation in the effect of proliferation over time. Nuclear proliferation influences the **timing, rather than the occurrence**, of disputes. While new nuclear states are prone to initiate militarized disputes, over time they moderate their policies and become as **likely to initiate disputes as they were before nuclear proliferation**.88 These effects wash out in statistical tests that do not control for experience with nuclear weapons. In short, if Iran and North Korea develop nuclear weapons and challenge their regional status quo, the historical record suggests that they will not do so for long. Thus James M. Lindsay and Ray Takeyh of the Council on Foreign Relations recently claimed that a nuclear Iran would be most dangerous “at first, when it would likely be at its most reckless.” But, “like other nuclear aspirants before them, the guardians of the theocracy might discover that nuclear bombs are **simply not good** for diplomatic leverage or strategic aggrandizement.” 89

Conclusion: proliferation pessimism, Iran, and North Korea

Three of the four mechanisms long alleged to make nuclear proliferation cause interstate conflict find **little to no empirical support** when the endogeneity, omitted-variable bias, and conceptual-confusion issues addressed above are recognized and applied to the evidence. Preventive-war motivations, nonsurvivable arsenals, and organizational logics that lead to accidents do not cause armed conflict. The only mechanism that has systematically led to conflict is conventional aggression by weak revisionists after nuclear proliferation, but a few years of experience with nuclear weapons moderates the conflict propensity of new nuclear states. By failing to specify how frequently we should observe preventive motivations, their effect on nonsurvivable arsenals, or how organizational logics lead to conflict, accidents, and nuclear war, **proliferation pessimist claims are unfalsifiable**. Pessimist scholars need to specify how much longer we should observe them not leading to conflict before concluding that their threat has been greatly exaggerated.

The undesirability of nuclear use has prevented scholars from coming to terms with what a more careful and systematic reading of the historical record suggests about the relationship between these mechanisms and conflict. Sagan has argued that proliferation fatalism and deterrence optimism reduce incentives to combat proliferation.90 But these same dynamics have led scholars to **vastly exaggerate** the number of threats posed by the spread of nuclear weapons. If the greatest danger posed by nuclear proliferation is conventional aggression in the short-term, scholars need to rediscover how **deterrence** can moderate the high conflict propensity of new nuclear states.91 Arguments about the frequency of nuclear escalation, however, say nothing about its cost. Isn’t the possibility of nuclear escalation on the Korean peninsula, for example, evidence against the arguments made throughout this paper? A few cases of accidental, unintentional, or deliberate nuclear escalation could show that the mechanisms offered by pessimist scholars linking nuclear proliferation and conflict survive the criticisms leveled at them here. A lower bar for the proliferation-pessimist theory to pass might be one case of nuclear escalation. But after seventy years, nuclear weapons have **not once** led to conflict through the mechanisms addressed here.

**Studies prove nuclear prolif has either no effect on the risk of interstate conflict or reverses it**

**Suzuki 15** (Akisato Suzuki - Adjunct Research Fellow at the School of Politics and International Relations, University College Dublin, “Is more better or worse? New empirics on nuclear proliferation and interstate conflict by Random Forests”, Research and Politics, 2015, <https://journals.sagepub.com/doi/pdf/10.1177/2053168015589625>, MG)

The main findings reveal that the optimist expectation of the relationship between nuclear proliferation and interstate conflict is empirically supported:9 first, a larger number of nuclear states on average **decreases** the systemic propensity for interstate conflict; and second, there is **no clear evidence** that the emergence of new nuclear states increases the systemic propensity for interstate conflict. Gartzke and Jo (2009) argue that nuclear weapons themselves have no exogenous effect on the probability of conflict, because when a state is engaged in or expects to engage in conflict, it may develop nuclear weapons to keep fighting, or to prepare for, that conflict. If this selection effect existed, the analysis should overestimate the conflict-provoking effect of nuclear proliferation in the above model. Still, the results indicate that a larger number of nuclear states are associated with fewer disputes in the system.

This conclusion, however, raises questions about how to reconcile this study’s findings with those of a recent quantitative dyadic-level study (Bell and Miller, 2015). The current paper finds that nuclear proliferation **decreases** the systemic propensity for interstate conflict, while Bell and Miller (2015) find that nuclear symmetry has no significant effect on dyadic conflict, but that nuclear asymmetry is associated with a higher probability of dyadic conflict. It is possible that nuclear proliferation **decreases conflict** through the conflict-mitigating effects of extended nuclear deterrence and/or fear of nuclear states’ intervention, to the extent that these effects **overwhelm** the conflict-provoking effect of nuclear–asymmetrical dyads. Thus, dyadic-level empirics cannot solely be relied on to infer causal links between nuclear proliferation and a systemic propensity for conflict. The systemic-level empirics deserve attention.