# Notes on the File

Definitions:

* UAV/Unmanned Arial Vehicle/Drone: All of these terms refer to unmanned military aircraft. Drones can either be armed or unarmed. Under international law, certain unarmed drones may be sold without restriction while all armed drones and some larger unarmed drones may not be sold.
* Commercial Direct Sales: includes sales negotiated between arms manufacturers and foreign governments.
* Foreign Direct Sales: includes sales negotiated between the U.S. government and foreign governments.
* MTCR: The Missile Technology Control Regime is the international standard applied to drone sales. The MTCR divides drones into two categories: Category 1 drones and Category 2 drones. All category 2 drones are unarmed and usually very small. While category 2 drones can be used for military surveillance, this category explicitly excludes most military drones. Category 1 drones include all armed and large unarmed military drones. The MTCR permits the sale of Category 2 drones, but not Category 1 drones.
* Proliferation: in the context of the affirmative, drone proliferation refers to the widespread and fast spread of drone technology to other countries.
* End-use Restrictions: End-use restrictions put limits on what buyers of U.S.-made weapons can do with those weapons. Examples of end-use restrictions include bans on the sale of used weapons and bans on the use of certain weapons in certain situations. End-use restrictions are often enforced by the U.S. refusing to engage in future sales and sanctions on violators.

Thoughts on Negative Strategy:

* The affirmative is very policy-debate forward with big impacts, and therefore it is weakest against the kritik and counterplans that solve the entirety of the affirmative (such as a process counterplan).
* It is possible to engage the affirmative on the case debate. For those teams who wish to pursue a disad-case strategy, the best advice I can provide is to question what the affirmative actually does versus what they claim to prevent. For example, the affirmative claims to prevent the proliferation of drones, but they only affect the sale of U.S. drones. Make sure to question the internal links underlying their arguments.
* This affirmative also has topicality questions. Are drones “arms” or are they simply vehicles that carry “arms”? Are unarmed drones “arms”?

Caution on Pre-Written 1NC Frontlines

* Because the 1AC is written very broadly, all teams, especially varsity-level teams should be aware that the format of the 1AC may change from debate to debate. As a result, any pre-constructed frontlines may not be accurate.

# Inherency - 1NC Frontline

**1. Trump’s regulations changes have failed and no drones have been sold - bureaucracy has resisted the regulation change**

**Seligman 2018**. Lara Seligman (staff writer), Trump’s Push to Boost Lethal Drone Exports Reaps Few Rewards, Foreign Policy, December 6, 2018, <https://foreignpolicy.com/2018/12/06/trump-push-to-boost-lethal-drone-exports-reaps-few-rewards-uas-mtcr/>

More than six months after the Trump administration rolled out a new set of regulations promising to make it easier to sell American-made military drones abroad, no new sales have been made, and drone-makers are frustrated by the lack of concrete results. Experts agree the administration has a genuine desire to ease the restrictions as part of a broader initiative to boost the competitiveness of U.S. products in a booming international market increasingly dominated by the Chinese. The challenge, according to observers and industry sources, is enforcing the new policy across a government bureaucracy that is both spread thin and stubbornly averse to change. “I know senior Commerce and Defense Department leadership want to see change, but we’ve seen little to none thus far in actual exports of advanced UAS,” said Ben Schwartz, the executive director of the Defense and Aerospace Export Council at the U.S. Chamber of Commerce, referring to unmanned aerial systems. The difficulty the Trump administration has had putting the new policy into practice reflects yet another example of a government agency deliberately trying to slow-walk the president. Industry sources said the Department of Defense, particularly the U.S. Air Force, has stubbornly resisted the change. “The Air Force has made the determination for national security reasons that certain airframes can only be transferred under the foreign military sales rule set,” rather than through commercial channels, one industry source said.

**2. Industry reluctance to change drone design means exports will remain low**

**Seligman 2018**. Lara Seligman (staff writer), Trump’s Push to Boost Lethal Drone Exports Reaps Few Rewards, Foreign Policy, December 6, 2018, <https://foreignpolicy.com/2018/12/06/trump-push-to-boost-lethal-drone-exports-reaps-few-rewards-uas-mtcr/>

Grant blamed industry for causing delays in exporting drones to allies by not building exportability—namely, protections of sensitive U.S. technology—into systems on the front end of the development process. “What happens now is things are built for the U.S., then when there is a customer demand then they start reconfiguring for export,” Grant said. “This puts us two years behind and allows the competition to get in front of us.”

# Inherency - Ext. Bureaucracy

**Drone exports are not a priority for the pentagon - lower level DOD hasn’t implemented Trump’s regulation changes**

**Seligman 2018**. Lara Seligman (staff writer), Trump’s Push to Boost Lethal Drone Exports Reaps Few Rewards, Foreign Policy, December 6, 2018, <https://foreignpolicy.com/2018/12/06/trump-push-to-boost-lethal-drone-exports-reaps-few-rewards-uas-mtcr/>

But the biggest obstacle to change, according to another industry source, is that easing drone exports is not a priority for the Pentagon, and no one has taken the lead in working out the gritty details. “I don’t think DoD is organized with the juice to get this done,” the source said. “Everyone’s got the message, but they don’t have the bench. [Defense Secretary James] Mattis can only call [National Security Advisor John] Bolton so many times a day.” The State Department is trying to implement a new policy approving marketing licenses that would allow companies to pitch prospective customers to buy their products, the industry source said. But right now, they have no license approvals that could not have been obtained under the old policy, the person noted.

# Inherency - AT: MTRC Repeal

**Can’t change MTCR for drone sales - Russia will veto**

**Seligman 2018**. Lara Seligman (staff writer), Trump’s Push to Boost Lethal Drone Exports Reaps Few Rewards, Foreign Policy, December 6, 2018, <https://foreignpolicy.com/2018/12/06/trump-push-to-boost-lethal-drone-exports-reaps-few-rewards-uas-mtcr/>

The administration submitted a proposal in March to add a speed criteria to the MTCR, a short-term fix that would exempt most drones, as they generally fly at slower speeds than missiles. Ultimately, the goal is to place drones in the same exempt category as crewed aircraft. But the administration faces several obstacles, including the fact that Russia is a member and could veto any proposed change. Webster was not hopeful any proposed changes would be approved. “It’s surprising that on things like the [Intermediate-Range Nuclear Forces] Treaty the administration is willing to take quite dramatic unilateral actions, but on something where we are in direct competition with the Chinese and we don’t even need to pull out of MTCR there is hesitation to take unilateral moves,” Schwartz said.

# Prolif - 1NC Frontline 1/3

**1. Drone prolif inevitable due to China - reducing export restrictions is key reduce the risks of bad prolif by cornering the market**

**Seligman 2018**. Lara Seligman (staff writer), Trump’s Push to Boost Lethal Drone Exports Reaps Few Rewards, Foreign Policy, December 6, 2018, <https://foreignpolicy.com/2018/12/06/trump-push-to-boost-lethal-drone-exports-reaps-few-rewards-uas-mtcr/>

Keith Webster, the president of the U.S. Chamber of Commerce’s Defense and Aerospace Export Council, also disputed the argument that selling more U.S. drones abroad will lead to the proliferation of WMD. Allowing China to control the market is where the true danger lies, he said. “Actually, the best way to manage the risk of [drones] being used for WMD is for the United States to be the one that exports it to partners, because when we export things we partner with the country that’s receiving it to ensure they are using it in a safe way,” Webster argued. “When the Chinese sell these things, we have no visibility into how the user is going to use it.” Experts are increasingly concerned that traditional U.S. allies are now turning to China for their drone needs. The Obama administration denied requests for armed or advanced unarmed drones from Jordan, the United Arab Emirates, and Iraq. Subsequently, these countries, along with Saudi Arabia, bought armed drones from China. “You’ve got to balance the competing priorities, but in this instance actually changing our policy to allow more commercial sales serves both a commercial imperative and a nonproliferation imperative,” Webster said.

**2. No transfers of sensitive tech means their worst impacts won’t occur - all sensitive materials must go through foreign military sales which have stronger end-use regulations**

**Seligman 2018**. Lara Seligman (staff writer), Trump’s Push to Boost Lethal Drone Exports Reaps Few Rewards, Foreign Policy, December 6, 2018, <https://foreignpolicy.com/2018/12/06/trump-push-to-boost-lethal-drone-exports-reaps-few-rewards-uas-mtcr/>

But Heidi Grant, the deputy undersecretary of the Air Force for international affairs, noted that despite the administration’s changes to drone export policies, “there are still going to be some systems that need to be protected.” Defense Department spokesman Lt. Col. Mike Andrews said the department is “fully supportive of implementing all aspects of this Administration’s updated UAS policy.” But he stressed that “particularly sensitive components and subsystems must be sold via Foreign Military Sales (FMS), as is the case for sensitive components and subsystems for manned aircraft sales.”

# Prolif - 1NC Frontline 2/3

**3. Turn: Benefits of drone exports outweigh risks of drone prolif - permits coordination with allies**

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

There are many advantages of allowing U.S. UAV manufacturers to sell UAVs to U.S. allies and partners. UAVs are valuable assets in achieving a variety of strategic, operational, and tactical objectives, including ISR missions and kinetic-strike operations. Close coordination and the ability to share UAV operations load is important for the United States in joint operations. This includes having the ability to control air vehicles and their subsystems, as well as the ingestion and integration of data. Tactical and operational interoperability is critical. UAVs have become the predominant tactical collection platform across all levels of command. This necessitates coordinating, sharing information to and from, and integrating UAVs into theater operations (Office of the Secretary of Defense, 2005). If more allies and partners operate UAVs that are not interoperable with U.S. systems, combined warfighting will become less efficient. Overall, given proliferation and interoperability issues, we conclude that it is more beneficial to allow the sales of category I (and near–category I) UAVs to allies and partners. We determined that, although some risks are associated with selling U.S. UAVs to allies and partners (e.g., misuse and potential loss of technologies), there are significant advantages to the United States related to enhanced interoperability that these exports enable for potential future operations. Although interoperability with partner UAVs is problematic (for potential cybersecurity, technical, and policy reasons) even when systems are U.S. manufactured, the associated challenges are easier to resolve when the UAV is built in the United States. High levels of interoperability are optimal, but work-arounds are currently in place to exercise command and control and to integrate data streams of partner UAVs. The United States is already doing this with U.S.-manufactured UAVs currently in use by the various service branches.

**4. No impact to drones - hard to use and easy to fight**

**Gilli and Gilli 2016**. Andrea Gilli (post-doctoral fellow at Metropolitan University Prague) and Mauro Gilli (post-doctoral fellow at Dartmouth College), So what if Iranian drones did strike Syria? We are not entering a dark age of robotic warfare, WashPo, April 4, 2016, [https://www.washingtonpost.com/news/monkey-cage/wp/2016/04/04/so-what-if-iranian-drones-did-strike-syria-we-are-not-entering-a-dark-age-of-robotic-warfare/](https://www.washingtonpost.com/news/monkey-cage/wp/2016/04/04/so-what-if-iranian-drones-did-strike-syria-we-are-not-entering-a-dark-age-of-robotic-warfare/?utm_term=.bba53fa79661)

So even if Iran has carried out its first drone strike, there’s no need to conclude we’re entering a dark age of drone warfare. That’s because on the one hand, the proliferation of drones around the world doesn’t increase the chance of instability and conflict. Developing and employing drones poses more challenges than generally acknowledged. U.S. investments in counter-drone systems will help prevent less-capable platforms from jeopardizing global peace and security. On the other hand, investing in counter-systems and in more advanced drone technology will help the U.S. military stay in the technological lead, especially if the U.S. military can harness the most advanced technologies now being developed by the U.S. private industry. The U.S. military has the experience to operate the information and communication technologies that military drones require — and will probably stay out in front in the age of robotics warfare.

# Prolif - 1NC Fronline 3/3

**5. US/China war unlikely due to Chinese military inferiority, economics, and allies**

Lukin 2014, Artyom Lukin (Professor @ Far Eastern Federal University (Russia), Imagining World War III -- In 2034, 8/4/2014, The World Post, http://www.huffingtonpost.com/artyom-lukin/world-war-iii\_b\_5646641.html

There are three reasons war is unlikely anytime soon. First, despite the double-digit annual growth in its defense budgets, China's military still significantly lags behind the U.S.' It will take China 15 to 20 years to attain parity or near-parity with the U.S.-Japan allied forces in the East Asian littoral. Second, for all the talk of mutual interdependence, China depends on America much more than the other way round. China is still critically reliant on the U.S and its allies, the EU and Japan, as its principal export markets and sources of advanced technologies and know-how. Overall, China's dependence on international markets is very high, with the trade to GDP ratio standing at 53 percent. China imports many vital raw materials, such as oil and iron ore. As most of its commodity imports are shipped by the sea, China would be extremely vulnerable to a naval blockade, which is likely to be mounted by the U.S. in case of a major conflict. Both for economic and strategic reasons, the Chinese government pursues policies to reduce the country's reliance on foreign markets, trying to shift from an export-oriented model to domestic sources of growth. It is also making efforts to secure raw materials in the countries and regions contiguous to China, like Central Asia, Russia or Burma, so as to reduce dependence on sea-born shipments. However, at least for the next 15 to 20 years China's dependency on the West-dominated global economic system is going to stay very significant. Third, China would have to confront not the U.S. alone but also America's Asian allies, including Japan, Australia and perhaps India. Thus China needs at least one major power ally and some lesser allies. Whether China dares to pose a serious challenge to the U.S. will, to a large extent, hinge upon Beijing and Moscow forming a Eurasian geopolitical bloc. This is already happening now, but it is going to take some more time. The bottom line: over the next 15 to 20 years a major war in Asia is highly unlikely because Beijing will be playing a cautious game. Even if a military clash does occur, it will be short, with China being quickly routed by the preponderant American force. However, around 2030 the balance is bound to undergo considerable changes, if China is successful in: 1) closing military gap with the U.S.; 2) making its economy less reliant on the Western markets and overseas raw resources; and 3) forming its own alliance structure.’

6. **No Middle East escalation**

**Gelb 2010**. (President Emeritus of the Council on Foreign Relations), GDP Now Matters More Than Force: A U.S. Foreign Policy for the Age of Economic Power, November/December, proquest

Also reducing the likelihood of conflict today is that there is no arena in which the vital interests of great powers seriously clash. Indeed, the most worrisome security threats today-rogue states with nuclear weapons and terrorists with weapons of mass destruction-actually tend to unite the great powers more than divide them. In the past, and specifically during the first era of globalization, major powers would war over practically nothing. Back then, they fought over the Balkans, a region devoid of resources and geographic importance, a strategic zero. Today, they are unlikely to shoulder their arms over almost anything, even the highly strategic Middle East. All have much more to lose than to gain from turmoil in that region. To be sure, great powers such as China and Russia will tussle with one another for advantages, but they will stop well short of direct confrontation.

# Prolif - Ext. - Drone Prolif Inevitable 1/2

**Drone proliferation is inevitable - China, Israel, and Iran are all selling them by gaming international arms export regulations**

**Horowitz 2017**. Michael C. Horowitz (associate professor of political science and the associate director of Perry World House at the University of Pennsylvania), Drones aren’t missiles, so don’t regulate them like they are, June 26, 2017, <https://thebulletin.org/2017/06/drones-arent-missiles-so-dont-regulate-them-like-they-are/>

A substantive criticism of this proposal might be that, even if including drones in the MTCR is arbitrary based on the reality of today’s technology, an overly restrictive policy is good because it helps prevent the spread of systems that could be used for targeted killings or domestic repression. Unfortunately, the current approach to drones within the MTCR framework is not substantially limiting drone proliferation, as a new report from the Center for a New American Security makes clear. (Full disclosure: I am one of the authors of the report.) Drone exports are increasing anyway, and both states and non-state actors have a growing ability to use commercial technology to build their own armed drones. Put another way, drone proliferation is inevitable: About 17 countries already have armed drone capabilities and more than a dozen are pursuing them. Of those countries, six or seven have acquired them in just the last two years, meaning the rate of proliferation is accelerating. The United States has only exported armed drones to one country, the United Kingdom, though it also approved a sale that would arm previously unarmed MQ-9 Reaper drones it sold to Italy in 2011. China, however, has reportedly exported armed drones to 10 countries (Egypt, Iraq, Jordan, Kazakhstan, Myanmar, Nigeria, Pakistan, Saudi Arabia, Turkmenistan, and the United Arab Emirates), and another six countries have built armed drones themselves (China, Iran, Israel, Russia, Turkey, and the United States). Iran has allegedly exported drones to Hezbollah, a non-state militant group. Essentially, suppliers exist that can deliver significant capabilities, and countries are beginning to have success at designing their own advanced and armed drones. Moreover, to claim technical compliance with MTCR guidelines, the armed drones China exports (the CH-3, Wing-Loong, and CH-4B) tend to have publicly announced payloads that fall just under 500 kg. (Countries voluntarily declare whether their platforms pass the Category I threshold, but there is no way to verify whether their statements about payload size are accurate.) Similarly, later this year, the Israeli firm IAI will deliver 10 armed Heron TP drones to India as part of a contract signed in 2015. IAI says that the exported variant of the Heron TP has a payload of 450 kg, in contrast to the more capable Israeli-operated variant, which is a Category I system. Why does this matter? There is nothing inherently consequential about the difference between 450 kg and 500 kg when it comes to the capabilities of a current-generation drone. In fact, what enables a country to operate a drone effectively is not a 50 kg difference in payload, but whether it has the organizational capacity to integrate large amounts of intelligence, surveillance, and reconnaissance data in real time. Nevertheless, continued gaming of the system undermines the MTCR as a whole by demonstrating that it cannot succeed over time in significantly restricting the number of states with militarily relevant drones.

# Prolif - Ext. - Drone Prolif Inevitable 2/2

**Drone prolif inevitable national security concerns force other countries to buy from China and Israel**

**Horowitz and Schwartz 2018**, Michael C. Horowitz (associate professor of political science and the associate director of Perry World House at the University of Pennsylvania) and Joshua A. Schwartz (PhD student in the political science department at the University of Pennsylvania), A new U.S. policy makes it (somewhat) easier to export drones, Washington Post, April 20, 2018, <https://www.washingtonpost.com/news/monkey-cage/wp/2018/04/20/a-new-u-s-policy-makes-it-somewhat-easier-to-export-drones/?utm_term=.7acaa5b1a529>

1. Current efforts to prevent armed drone proliferation are not working. In the past, U.S. drone policy reflected a belief that if the United States restrained from exporting armed drones by strictly adhering to the MTCR, then other states, especially ones that regularly abuse human rights, could not acquire them. However, according our ongoing research, about 20 countries now have armed drones. This includes many countries with questionable human rights records, such as Iran, Egypt, Uzbekistan and Burma. So how did armed drones spread, given U.S. restrictions on exports? Supply and demand. National security concerns, among other factors, have led many countries to seek armed drones. That demand found a supplier in China and, to a lesser extent, Israel. Of the countries (excluding China) that have acquired armed drones since 2010, 11 purchased them from China. Another, India, recently acquired armed drones from Israel. While China and Israel claim to follow the MTCR’s general guidelines, neither are MTCR members. These trends suggest that drone proliferation may be inevitable — and that’s a likely reason for the Trump administration’s approach to drone export policy. Moreover, the Trump administration may believe that if countries buy American, this gives the United States greater influence over how they use their drones than if they buy elsewhere.

**Drone prolif inevitable - MTCR is evaded by purchases from non-MTCR nations**

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

The current pervasiveness of near–category I UAVs and the apparent future trend in the spread of category I systems lead us to conclude that the proliferation of large UAVs is ongoing and accelerating. Our analysis also suggests that the MTCR has had some effect on controlling the

proliferation of category I UAVs. The United States has limited the export of these vehicles to a small set of allies, and most MTCR signatories have so far restrained from developing these large UAVs. None, to our knowledge, has yet exported them to non–MTCR signatories. However, the landscape has changed dramatically in recent years. Non-MTCR nations, primarily China and, to a lesser extent, Israel, have exported large armed and unarmed near–category I UAVs, and China has recently openly marketed an armed category I system. Some non-MTCR nations have shown interest in building up their UAV capabilities and might either purchase these large UAVs or decide to coproduce them with China’s help. Furthermore, some cracks appear to be forming within MTCR signatories. Germany is codeveloping a category I optionally piloted aircraft with Qatar, and Italy plans to export a potentially category I system to the UAE. We also conclude that the category I MTCR restrictions might be negatively affecting the capabilities of and interoperability with allies and partners.

# Prolif - Ext. - No Misuse

**Trump’s rule changes leave export controls in place**

**Mehta 2018**. Aaron Mehta, Trump admin rolls out new rules for weapon, drone sales abroad, DefenseNews, April 19, 2018, <https://www.defensenews.com/news/pentagon-congress/2018/04/19/trump-admin-rolls-out-new-rules-for-weapon-drone-sales-abroad/>

Despite fears from nongovernmental organizations that human rights concerns would be weakened under the new policy, both Navarro and Kaidanow pushed back at the idea human rights were being weakened under the new policy, with Kaidanow saying “nothing” had changed from that regard. Navarro added that the policy continues to “require enhanced end use monitoring, directing the federal government to work with partners to reduce civilian casualties in conflict and championing principals of human rights in international law, including the law of armed conflict.”

**Other export controls mechanisms ensure no misuse of UAV tech - empirics prove**

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

In general, increasing exports of any weapon system increases the risk that technology in that

system will be compromised either by the purchasing nation or a third party. According to

military subject-matter experts involved in U.S. security assistance programs, technology risk

can be a significant concern when providing UAV systems to some U.S. allies and partners.

Many nations do not apply the same level of operational security to their weapon systems as

the United States does, and sometimes they transfer these systems to third parties.3 The lost

technology could be used to develop countermeasures against U.S. platforms or to enhance the

capabilities of another manufacturer’s systems. Logically, the risk of illicit technology transfer

will increase the more systems are sold and the greater the number of nations that acquire these

capabilities from the United States. However, we also note that the United States has exported

billions of dollars’ worth of advanced weapons in the past and has extensive experience in

limiting the loss of its weapon technologies. Thus, we conclude that current export control on

category I UAV systems reduces the risk of U.S. technology being compromised and therefore

assess it as positive.

# Prolif - Ext. - U.S. Drone Prolif Good 1/2

**Proliferation of U.S.-built UAVs is key to future warfighting and military cooperation with allies**

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

As UAVs proliferate, there will likely be more incentives to increase interoperability between foreign-operated UAVs and U.S. military systems and organizations. The export policy regarding U.S. UAVs will affect what systems U.S. allies will be using and will likely influence the future level of interoperability. In the foreseeable future, U.S. coalition allies that operate in tandem with the U.S. military will overwhelmingly be using UAVs built by the United States and its allies (such as the

U.S.-built MQ-9 and the Israeli-built IAI Heron TP-XP) rather than those exported by China (such as the CH-5). An important question regarding future interoperability is whether the increased export and use of U.S. UAV systems will result in more-effective interoperability than continued reliance on Israeli or other allied UAV systems. It is, however, possible for allybuilt UAV systems to meet many of the technical interface requirements (e.g., STANAG) to enable better interoperability with U.S.-built systems. Probably, operational effects of increasing the use of U.S.-manufactured UAVs could be realized in the future. Being able to leverage both U.S. and allied personnel, logistics, and materiel in support of U.S.-made UAVs could further enhance the effectiveness of U.S. UAV systems. This will be achieved much more easily if U.S. allies and partners are using UAVs manufactured in the United States. Depending on the level of integration between U.S. and coalition forces, greater ally and partner use of U.S.-manufactured systems could create a significant advantage to the logistical support surrounding the maintenance and operation of coalition UAV systems. On the other hand, if U.S. partners increase their use of UAVs made by other nations, the logistical complexity to support the diverse array of UAV platforms in an allied operation will increase. As discussed earlier, there are both technical and protocol challenges to interoperability between U.S.- and partner-operated systems. Currently, policy and organizational structures limit the direct interface between foreign-operated UAVs and U.S. systems. This is the case even when a U.S. company manufactured the foreign-operated UAV or the system is otherwise technically capable of interfacing with U.S. systems. If U.S. UAV exports are intended to increase the level of interoperability, it is essential to consider whether organizational and policy challenges override perceived technical benefits. In the future, if organizational schemes are put in place to enable UAV interoperability, increasing the export of large U.S. UAVs would make it easier to achieve higher levels of interoperability.

# Prolif - Ext. - U.S. Drone Prolif Good 2/2

**U.S.-made UAVs are key to future joint strike missions with allies**

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

There are many advantages of allowing U.S. UAV manufacturers to sell UAVs to U.S. allies and partners. UAVs are valuable assets in achieving a variety of strategic, operational, and tactical objectives, including ISR missions and kinetic-strike operations. Allies and partners would therefore benefit from acquiring UAVs, regardless of whether they are made in the United States. However, we assess that it would be more beneficial for the acquired UAVs to be U.S. made because they would help combined operations by facilitating logistical support and data distribution. Close coordination and the ability to share UAV operations load are important for the United States to leverage UAVs in joint operations. This includes having the ability to control air vehicles and their subsystems, as well as to ingest and integrate data. Tactical and operational interoperability is critical. UAVs have become the predominant tactical collection platform across all levels of command. This necessitates coordinating, sharing information to and from, and integrating UAVs into theater operations (Office of the Secretary of Defense, 2005). If more allies and partners begin to operate UAVs that are not interoperable with U.S. systems, joint warfighting will likely become less effective. Overall, given proliferation and interoperability issues, we conclude that it is more beneficial to allow than prevent the sales of category I UAVs to allies and partners. We determined that, although some risks are associated with selling allies and partners U.S. UAVs and the technology inherent in them, there are significant advantages related to the enhanced interoperability that these exports enable, as summarized in the first column of Table 4.3.

**Sales of U.S. UAVs to other nations permits defense contractors to gain valuable testing data to improve future UAV designs - ensures future U.S. UAV superiority**

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

Military planners, equipment operators, and manufacturers all benefit from the opportunity

to operate their systems. The operational experience they receive provides feedback on system

performance that is normally used to improve procedures and make modifications to platforms

and supporting architectures. Permitting wider exports of U.S. UAVs would increase the

amount of operational expertise available to the U.S. UAV community while precluding adversaries

from acquiring comparable levels of operational experience when a country purchases

a U.S. system rather than one from an adversary nation. Additionally, allies and partners can

leverage UAV operational expertise resident in U.S. forces to improve their own operational

capabilities. We judge that current export restrictions have a somewhat negative effect on U.S.

and allied operational capabilities.

# Prolif - Ext. - No Impact to Drones

**Hard for other nations to employ drones - lack of logistical infrastructure**

**Gilli and Gilli 2016**. Andrea Gilli (post-doctoral fellow at Metropolitan University Prague) and Mauro Gilli (post-doctoral fellow at Dartmouth College), So what if Iranian drones did strike Syria? We are not entering a dark age of robotic warfare, WashPo, April 4, 2016, <https://www.washingtonpost.com/news/monkey-cage/wp/2016/04/04/so-what-if-iranian-drones-did-strike-syria-we-are-not-entering-a-dark-age-of-robotic-warfare/?utm_term=.bba53fa79661>

Perhaps most important, employing drones for military operations is extremely challenging. As Ron Adner of the Tuck School of Business at Dartmouth College explains, any innovation poses what he calls “ecosystem challenges.” Simply put, innovations generally require organizational and infrastructural support. The more daunting such challenges are, the more difficult adopting an innovation will be. To operate medium- to long-range drones, armed forces need advanced communication systems, command and control infrastructures, and skilled personnel. Even the U.S. military, despite unrivaled satellite communications, still struggles to allocate enough satellite bandwidth to employ its military drones in different parts of the world. Troops that want to operate these platforms must have a set of tactical procedures and operational concepts — but developing these takes time and political effort, as military innovations generally encounter strong resistance within the military and from a government. The United States and Israel took several years to learn how to effectively fly and operate drones in combat. Could other countries, with more limited experience, lower budgets, and less-skilled and experience personnel, really catch up swiftly? Look at Iraq’s drone program. Last year, the Iraqi government bought military drones from China. But Iraq doesn’t have any communication satellites. Therefore, it must pilot its drones using relatively short-range direct radio waves (in technical terms, this is “line-of-sight” communications). Radio waves, however, are easy to jam, so Iraq can fly its drones only within its borders, making them all but impossible to use to start a war with another country. What’s more, when Iraqi armed forces first used this new technology, they mistakenly hit their own ground troops instead of the intended Islamic State targets. Operating advanced technology is never easy, especially without experience.

**No impact - our drones are better and we’ll win every drone fight**

**Gilli and Gilli 2016**. Andrea Gilli (post-doctoral fellow at Metropolitan University Prague) and Mauro Gilli (post-doctoral fellow at Dartmouth College), So what if Iranian drones did strike Syria? We are not entering a dark age of robotic warfare, WashPo, April 4, 2016, <https://www.washingtonpost.com/news/monkey-cage/wp/2016/04/04/so-what-if-iranian-drones-did-strike-syria-we-are-not-entering-a-dark-age-of-robotic-warfare/?utm_term=.bba53fa79661>

Our research also suggests that U.S. technology development is outpacing the worldwide spread of military drones. As the U.S. military creates next-generation drones, other countries are still struggling to produce first-generation drones — which are vulnerable to the most basic counter-systems, such as a rifle shot or controls hacked with off-the-shelf software. What does this mean? As the United States and its allies develop capable and effective anti-drone systems, many countries’ current (or hoped-for) fleets of drones will inevitably become obsolete — at least against U.S. or allied troops and facilities. That doesn’t mean we should completely dismiss the threat, but the broader implication is quite straightforward. Proliferation of these earlier-generation platforms isn’t likely to affect global peace and stability.

# Prolif - Ext - No China War

**China won’t escalate any conflict to nuclear level—NFU, no interests**

Cunningham and Fravel 2015. Fiona S. Cunningham (Member of the Security Studies Program at MIT), and M. Taylor Fravel (Associate Professor of Political Science and member of the Security Studies Program at MIT), Assuring Assured Retaliation, Fall 2015 <http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC_a_00215>

Our analysis of Chinese views on the strategic posture of the United States yields two important findings. First, China will not abandon its strategy of assured retaliation in response to an increasingly clear U.S. commitment to strategic primacy.7 China currently believes that it is both possible and desirable to maintain assured retaliation, despite U.S. pursuit of the capabilities necessary to achieve strategic primacy. China has retained its no-first-use policy while modernizing and modestly expanding its nuclear forces. Instead, China will alter how it implements its strategy of assured retaliation, increasing the capabilities for the “assuredness” of retaliation by increasing the number of missiles and warheads that can strike the continental United States. China is also allowing limited ambiguity over the application of its no-first-use policy, especially if the United States were to use conventional weapons to attack Chinese nuclear weapons or their supporting infrastructure. Second, Chinese strategists are relatively and perhaps unexpectedly optimistic about U.S.-China crisis stability, now and in the future. Recent international relations scholarship has warned that the combination of mutual possession of nuclear weapons and conventional military asymmetry creates both risks of unintentional nuclear escalation and incentives for China and the United States to manipulate the risk of nuclear escalation for bargaining purposes during a crisis. By contrast, China’s strategists believe that the interests at stake would be too low in any U.S.-China scenario for either side to create risks of nuclear escalation. Moreover, China’s no-first-use policy means that only the United States would escalate to the nuclear level, which is unlikely, given its conventional military superiority over China. In addition, China is allowing limited ambiguity over its no-first-use policy to deter the United States from attacking China’s nuclear forces with conventional weapons. With some exceptions, Chinese strategists are not worried that this ambiguity could be mistaken for Chinese preparations to actually use nuclear weapons first. Chinese strategists also dismiss U.S. concerns that implementing the AirSea Battle Concept could result in escalation, because they dismiss the possibility that China’s nuclear capabilities could be unintentionally compromised by U.S. conventional attacks. Doctrinal materials suggest that the People’s Liberation Army (PLA) has been planning to protect its nuclear forces and its command and control facilities from conventional attacks for at least a decade, which suggests that if the AirSea Battle Concept threatens China’s nuclear weapons, it is not a novel threat.

# Prolif - Ext. - No Middle East War

**No military threat of middle east escalation**

**Logan 2014**. Justin Logan (director of foreign policy studies at the Cato Institute), Politico, Why the Middle East Still Doesn’t Matter, 10/7/2014 http://www.politico.com/magazine/story/2014/10/why-the-middle-east-still-doesnt-matter-111747.html#ixzz3FxV2n5EC

One scenario in which the U.S. military might come in handy is if a state like Iran tried to conquer and consolidate control over a major oil terminal such as Ras Tanura in Saudi Arabia, giving it an uncomfortable, not to say market-making, amount of control over world oil markets. Fortunately, though, Iran doesn’t have anywhere near that kind of power-projection capability and if it did, America’s carrier-based airpower and long-range bombers could handle the threat relatively easily. Another Middle East fear involves Israel. Here again, the precise problem is rarely spelled out, but people believe that Israel, small and friendly with the United States, lives in a bad neighborhood and benefits from a robust American presence in the region. The problem is that Israel in 2014 fits differently into the region than it did in the dangerous years after its founding. It enjoys an enormous qualitative military edge over any combination of potential regional rivals. It has roughly 200 nuclear weapons deployed on an array of platforms, including submarines,that give it a secure second-strike capability against any state in the region that might dare to threaten its survival. It is hard to see, moreover, how the maelstrom of sectarian conflict that recent U.S. policy has helped unleash across the region has benefited Israel. Finally, of course, are fears about terrorism. This explanation for why the Middle East supposedly matters is peculiar, in that the basic contours of U.S. policy in the region predate 9/11. It is tough to think that a concern that emerged after a policy began explains the policy. But there is no evidence that terrorism is a threat that warrants an effort to micromanage the Middle East. The chance of an American being killed by terrorism outside a war zone from 1970-2012 was roughly one in 4,000,000. By any conventional risk analysis, this is an extraordinarily lowrisk. Perhaps this is why, as early as 2002, smart risk analysts were asking questions about counterterrorism policy such as “How much should we be willing to pay for a small reduction in probabilities that are already extremely low?” The amount we’re paying now to fight terrorism—roughly $100 billion per year—is simply crazy. If someone ran a hedge fund assessing risk the way the U.S. government has responded to terrorism, it would not be long for the world. Indeed, it is difficult to identify how U.S. policy across the region—with the possible exception of some drone strikes and special operations raids—have reduced the extremely low probability of another major terrorist attack. If anything, our policies may have increased them. Writing in 2007, Philip Auerswald presciently argued that “the first, most severe, and likely most enduring mistake made with regard to Iraq was believing that any country in the Middle East matters enough in the 21st century to justify starting a war.” We’re back at it in 2014, despite the fact that none of the reasons frequently offered for obsessing over the Middle East stands up to scrutiny. Meanwhile, we have created cadres of Middle East obsessives who argue that their region of study is vital, while America’s slighted Asia Pivoteers whinge from the sidelines, not daring to speak the heretical truth: The Middle East, from a military point of view, is little more than a waste of time.

# AT: Drones and Nuclear Weapons

**No threat from WMDs carried by UAVs**

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

Nefarious actors might consider UAVs as delivery vehicles for WMD. Given UAVs’ capability to carry conventional missiles, nations with WMD could potentially arm UAVs with small nuclear or chemical missiles. However, there are disadvantages to doing so. Given the vulnerability of available UAVs to air defenses, arming them with WMD would subject their owners to significant risk of losing control of these weapons. States with WMD have deployed more efficient and more-effective delivery means—missiles and manned aircraft—because they are significantly more survivable than most available UAVs are. Although some terrorist groups aspire to acquire WMD, very few have made progress, and they would be more likely to use simpler delivery methods. Moreover, there are significant limitations in employing UAVs to deliver WMD, as detailed in a previous RAND report (Davis et al., 2014, pp. 6–7). As far as the use of large UAVs to deliver nuclear weapons, similar or potentially greater challenges apply. Nations pursuing nuclear weapons have more-effective and more-assured means of delivering these payloads via missiles and manned aircraft. A high-value payload, such as a nuclear weapon, would likely not be placed on a relatively low–survivable UAV

platform.

# AT: Drones and Bioweapons

**Drones can help prevent bioweapons attacks**

**Kaleenborn and Bleek 2019**, Zachary Kaleenborn (independent national security researcher/analyst specializing in CBRN terrorism) and Phillip C. Bleek (Associate Professor of the Nonproliferation and Terrorism Studies Program at the Middlebury Institute of International Studies at Monterey), Drones of Mass Destruction: Drone Swarms and the future of nuclear, chemical, and biological weapons, War on the Rocks, Feb. 14, 2019, <https://warontherocks.com/2019/02/drones-of-mass-destruction-drone-swarms-and-the-future-of-nuclear-chemical-and-biological-weapons/>

At the same time, drone swarms may also help prevent and respond to chemical and biological weapon attacks. Drone swarms could aid counter-proliferation efforts by, for example, coordinating searches for previously unknown chemical and biological facilities to secure stockpiles after a war. They could similarly coordinate searches along national borders to identify potential smuggling activity, including CBRN material smuggling, or searches through cities to search for gaseous plumes. Notably, swarms could serve as mobile platforms for chemical or biological detectors with different types of sensors to mitigate false positives. If an attack is successful, drones could coordinate mapping of affected areas to help guide responders. Drones could even have sprayers to help clean up after an attack, without risking harm to humans. But given the rarity of chemical and biological weapons attacks and the technical uncertainty of creating reliable, drone-based CBRN detectors, these applications appear less significant than the improvements to offensive capabilities.

# AT: Drones and Meltdowns

**Actual nuclear meltdowns highly unlikely - even explosions don’t cause leaks**

**Bellona News 2011**. 9/12/11, “Breaking: Explosion rocks French nuclear facility; no radiation leaks apparent,” http://bellona.org/news/nuclear-issues/accidents-and-incidents/2011-09-breaking-explosion-rocks-french-nuclear-facility-no-radiation-leaks-apparent

There is no immediate evidence of a radioactive leak after a blast at the southern French nuclear facility of Marcoule near Nimes which killed one person and injured four others, one seriously, French media have reported and safety officials have confirmed. There was no risk of a radioactive leak after the blast, caused by a fire near a furnace in the Centraco radioactive waste storage site, said officials according to various media reports. The plant’s owner, national electricity provider EDF, said it had been “an industrial accident, not a nuclear accident.” “For the time being nothing has made it outside,” said one spokesman for France’s Atomic Energy Commission who spoke anonymously to the BBC. The Centraco treatment centre, which has been operational since February of 1999, belongs to a subsidiary of EDF. It produces MOX fuel, which recycles plutonium from nuclear weapons. “[Marcoule] is French version of Sellafield. It is difficult to evaluate right now how serious the situation is based on the information we have at the moment. But it can develop further,” said Bellona nuclear physicist Nils Bøhmer. The local Midi Libre newspaper, on its web site, said an oven exploded at the plant, killing one person and seriously injuring another. No radiation leak was reported, the report said, adding that no quarantine or evacuation orders were issued for neighboring towns. A security perimeter has been set up because of the risk of leakage.

# China Drones Disad - 1/2

**A. Chinese sales of combat drones high now - its’ the only real market player and U.S. drones aren’t for sale**

**Turak 2019**. Natasha Turak, Pentagon is scrambling as China ‘sells the hell out of’ armed drones to US allies, CNBC, Feb. 21, 2019, <https://www.cnbc.com/2019/02/21/pentagon-is-scrambling-as-china-sells-the-hell-out-of-armed-drones-to-americas-allies.html>

Simply put, China’s weaponized drones are on the market when others aren’t. The UAE has had Chinese Wing Loong I drones since 2016, and started receiving its purchases of the upgraded and deadlier Wing Loong II in early 2018. The UAVs, intended for surveillance and reconnaissance, can carry a range of weapons including missiles and laser-guided bombs to blow up targets on land or in the air. The Saudis have bought China’s CH-4 and the Wing Loong II, and both countries have deployed their drones in Yemen. Last summer, Riyadh confirmed that the Chinese were building a CH-4 production facility — the first drone factory in the region — in Saudi Arabia. The CH-4, an ISR (intelligence, surveillance and reconnaissance) and attack drone with similarities to the Reaper, is also used by the UAE, Iraq and Egypt. In addition to being able to sell to any willing buyer, the Chinese also offer the lowest prices on the market. According to Jack Watling, a land warfare expert at the Royal United Services Institute (RUSI) in London, the UAE’s Chinese drone purchases began after the U.S. refused to sell them American armed UAVs.

**B. Trump’s regulations changes will push China out of the market - U.S. drones are better and deadlier - the plan reverses course**

**Turak 2019**. Natasha Turak, Pentagon is scrambling as China ‘sells the hell out of’ armed drones to US allies, CNBC, Feb. 21, 2019, <https://www.cnbc.com/2019/02/21/pentagon-is-scrambling-as-china-sells-the-hell-out-of-armed-drones-to-americas-allies.html>

Now, he says, “the (President Donald) Trump administration has reduced its threshold for sale, which partly happened after the UAE started its Chinese drone purchases.” Gulf militaries do have American drones, but not ones capable of destroying targets. These include the U.S.-made Predator XP, which can carry ISR camera packages, but it’s downgraded so that it can’t carry weapons systems. Still, Watling says, U.S platforms are better than their Chinese counterparts — **and if given the opportunity, buyers would likely choose those**. “Chinese UAS (unmanned aerial systems) are not as stable as American systems,” he explained. “They therefore have to fly lower, though they are improving. This has resulted in several Chinese platforms being shot down.”

# China Drones Disad - 2/2

**C. Chinese drones are far more likely to fall into the hands of terrorists, makes them uniquely worse than the US**

Reimann 2019. Jakob Reimann (contributor to Foreign Policy In Focus), China is Flooding the Middle East With Cheap Drones, Feb 18, 2019, https://fpif.org/china-is-flooding-the-middle-east-with-cheap-drones/

Of particular concern is China’s drone policy in Saudi Arabia. A $ 65 billion economic program clinched between the two countries in spring 2017 includes the construction of a Chinese drone factory in Saudi Arabia — the first of its kind in the region. Initially, the license production of 300 drones was agreed, which represents a massive figure given the 88 drones that China has exported in the last decade altogether. However, the license drones are not exclusively intended for the Saudi Royal Air Force — Riyadh can explicitly market them to other countries in the region. End-user certificates do not exist for deals with Beijing. In view of the fact that Saudi Arabia, along with supporting various jihadist groups in the region, is a close ally of Al Qaeda in Yemen, it is within the realm of possibility to envision some of these drones end up in terrorist’s hands. Fueled by Beijing’s export policy, the threat scenario of drone-armed jihadists has moved significantly closer. Research by the Jamestown Foundation shows that we have already entered the era of “unmanned terrorism.” Groups commonly labelled as “terrorists” from Syria, Iraq, and Afghanistan to Gaza, Lebanon, and Yemen are already using mini-drones to drop bombs, grenades, and incendiary devices onto enemy positions or civilian facilities. Further flooding the region with cheap combat drones from China will certainly heave these tactics to the next level in the future. Since 2001, thousands of people, most of them civilians, have been killed by drone in the so-called “War on Terror,” changing the nature of war in its entirety and exposing civilians in all these undeclared war zones to a permanent threat on their lives. Nobel Peace Prize laureate Barack Obama proved he could always escape punishment and international condemnation even after using drones to turn weddings and funerals into blood baths and mass graves. And so, the desires of local actors to acquire these practical killing tools were aroused, too. The Chinese leadership is exploiting these developments without compromise and flooding the Middle East with cheap drones. The consequences of this expansionary policy cannot be foreseen. Pandora’s box is already open.

**D.** [insert a terrorism impact from the affirmative file’s terrorism add-on section]

# China Drones Disad - Uniqueness/Link Ext. 1/2

**Easing export restrictions directly eats away at China’s competitive drone sales advantage - plan reverses this**

**Horowitz and Schwartz 2018**, Michael C. Horowitz (associate professor of political science and the associate director of Perry World House at the University of Pennsylvania) and Joshua A. Schwartz (PhD student in the political science department at the University of Pennsylvania), A new U.S. policy makes it (somewhat) easier to export drones, Washington Post, April 20, 2018, <https://www.washingtonpost.com/news/monkey-cage/wp/2018/04/20/a-new-u-s-policy-makes-it-somewhat-easier-to-export-drones/?utm_term=.7acaa5b1a529>

3. Existing export restrictions gave China a strategic advantage. By dominating the armed drone export market thus far, China has built defense relationships with countries around the world — including U.S. allies and partners. The Obama administration denied requests for armed or advanced unarmed drones from Jordan, the United Arab Emirates and Iraq. Subsequently, these countries bought armed drones from China. Saudi Arabia has also purchased armed drones from China. The Trump administration thus might have thought that a restrictive drone export policy was ceding influence to China, something of concern, given that Trump’s national security strategy characterized China as a “competitor” and a “revisionist” power, and Trump himself labeled China a “rival” in his State of the Union address.

**China will fill-in for the US, results in the spread of drones**

Reimann 2019. Jakob Reimann (contributor to Foreign Policy In Focus), China is Flooding the Middle East With Cheap Drones, Feb 18, 2019, https://fpif.org/china-is-flooding-the-middle-east-with-cheap-drones/

While the Pentagon continues to this day to deliver armed Reaper drones only to the UK, France, and Italy, purchasers of Chinese combat drones, according to Chinese manufacturers, include Algeria, Egypt, Ethiopia, Iraq, Jordan, Myanmar, Nigeria, Pakistan, Saudi Arabia, Turkmenistan, the UAE, and Zambia. So far, the three largest buyers of Chinese drones are Pakistan (with a share of 25 percent) as well as Egypt and Myanmar (with 23 and 13 percent, respectively). Several of Beijing’s buyers are close strategic U.S. allies who have requested the sale of armed drones from Washington to no avail and have thus fallen back on Chinese products. The U.S. is by far the largest arms exporter and usually sells military equipment to almost every country in the world. According to the SIPRI research institute, the U.S. sold $98 billion worth of weapons to as many as 112 countries in 2007-2017. Hence, on the face of it, it seems rather counterintuitive that it would hand over the lucrative battle drone market to China. A recent report by the DIA, the Pentagon’s internal intelligence service, deals with this contradiction. “China is a niche provider of armed [drones]” in the Middle East, the report acknowledges, and correctly concludes that “China faces little competition” as it is not a member of international export control regimes. In fact, unlike the U.S. and the European arms-exporting countries, China is not a contracting party to the Missile Technology Control Regime (MTRC), which strictly regulates the proliferation of combat drones and makes U.S. drone exports to the Middle East more difficult.

# China Drones Disad - Uniqueness/Link Ext. 2/2

Plan allows China to retain drone market dominance

Reimann 2019. Jakob Reimann (contributor to Foreign Policy In Focus), China is Flooding the Middle East With Cheap Drones, Feb 18, 2019, https://fpif.org/china-is-flooding-the-middle-east-with-cheap-drones/

And so, quickly other countries in the region aspired after the financially — and politically — cheap execution by drone. The number of armies with their own drone fleet is growing rapidly. A multi-billion-dollar market with astronomical growth rates opened up — demand that’s essentially served only by one actor: China. The U.S. has squandered its lead The appearance of the Rainbow CH-4 — the driving force of Chinese combat drones — is almost identical to the notorious Reaper drone of the U.S. arms manufacturer General Atomics. While the CH-4 lags behind the Reaper in most performance parameters, it can keep up with or even outperform its competitor in some of them. Also, the CH-4’s weaponry, the AKD-10 warhead, is almost identical to the Reaper’s Hellfire missiles. The striking similarity follows a strategy of Chinese engineering well-known from cell phones or cars: the look of a world-famous Western branded product is copied with an inferior but sufficiently good quality compared to that of the original — but at significantly less cost. Chinese drones are 50 to 75 percent cheaper than the originals from the U.S. A late 2015 article published in the Asia Times suggests that this copying of U.S. technology is likely rooted in Beijing’s data theft. According to records by world-famous NSA whistleblower Edward Snowden, by 2010 alone “Chinese hackers had conducted more than 30,000 cyber attacks” on Pentagon computer networks and other U.S. military agencies in order to “exfiltrate [data on] sensitive military technology.” Although there is no final proof that data on drones were skimmed off too, Asia Times quotes then NSA director Gen. Keith Alexander, who suggests that it is highly likely that the Reaper blueprints were part of the Chinese data hack, while military experts and analysts largely share this view.With the latest model — the CH-7, which is still in the development phase — China could possibly pull ahead the U.S. for the first time, military journal Defense One explains. The CH-7 “will be the sole option for buyers wanting to field stealth combat drones,” it predicts. “The United States had a decade-plus head start on [drone] technology,” says military expert Paul Scharre, “and has unfortunately squandered that lead.” China captures the market

# Congress Counterplan - Solvency

**Congressional action on drones is key - sends a signal that results in international solvency**

**Kreps and McCain 2017**. Sarah Kreps (associate professor of government and adjunct professor of law at Cornell University) and Miles McCain (founder of Politiwatch), Congress keeps quiet on U.S. drone policy — and that's a big problem, WashPo, Aug. 24, 2017, <https://www.washingtonpost.com/news/monkey-cage/wp/2017/08/24/congress-keeps-quiet-on-u-s-drone-policy-and-thats-a-big-problem/?utm_term=.8e0b7bbda95d>

In 2017, drone activity has skyrocketed, with little indication of an increase in legislative attention to drones. U.S. drone strikes raise serious questions about domestic and international law, and rely either on stretching the 2001 AUMF or the president’s executive power. Drone strikes raise important legal questions in the broader international context. Counterterrorism strikes outside the context of armed conflict are illegal, as they violate the norms of territorial integrity — which are intended to prevent countries from treating the entire world as their battlefield. There’s also a risk of setting a precedent that might encourage other countries to further violate the fundamental principles of international sovereignty. In a May 2013 speech, Obama said that drones had become a “cure-all” for counterterrorism. After that point, he appeared to rely less on their use. Four years later, however, with a new president and an absence of any meaningful public congressional engagement on the topic of drones, there has been a steady increase in drone strikes — and renewed concerns that the drone war on terrorism may become a war without end.

# DIB Link

**Nacouzi et al 2018**, George Nacouzi (Senior Engineer at the RAND Corporation within PAF (Project Air Force) and NSRD (National Security Research Division), other authors include: J.D. Williams, Brian Dolan, Anne Stickells, David Luckey, Colin Ludwig, Jia Xu, Yuliya Shokh, Daniel M. Gerstein, and Michael H. Decker, Assessment of the Proliferation of Certain Remotely Piloted Aircraft Systems, RAND Corp., 2018, <https://www.rand.org/pubs/research_reports/RR2369.html>

UAV export controls have a variety of economic impacts on U.S. industry. We evaluate these

impacts examining the following factors:

• global market share of category I UAVs: the U.S. fraction of total global sales

• cost to U.S. customers: the UAV unit price that U.S. customers would pay

• industrial base: the manufacturers, as well as suppliers and subcontractors involved in

developing, manufacturing, and supporting the UAV industry

• research and development (R&D): the financial investment allocated to UAV technology

R&D

• future opportunities: share of potential future commercial and civilian market opportunities

related to large-UAV applications.

Global Market Share of Category I Unmanned Aerial Vehicles

The United States is currently the largest exporter of category I UAVs; however, qualitative

information obtained from discussions with industry representatives indicates that U.S. industry

has lost a significant number of category I UAV export opportunities as a result of exportcontrol

restrictions. Several countries that could not purchase U.S. systems turned to foreign

sources to fulfill their needs.4 Although it is unclear what fraction of the export rejections

the MTCR caused, nations that have been denied UAV exports, such as Saudi Arabia, were

approved for other U.S. advanced weapon systems (Muralidharan, 2017). As discussed in

Chapter Two, foreign UAV manufacturers are in the process of developing category I systems or have already done so and are offering them for export. Therefore, the United States is losing

market share to those nations willing to bypass MTCR constraints and more easily approve the

export of category I UAVs to allies and partners to which the United States has opted not to sell

these systems. Given the available information, we assess that maintaining category I restrictions

reduces the U.S. market share of global UAV sales and therefore assess it as negative.

Cost to U.S. Customers

Typical cost curves exhibit a unit price reduction as a larger number of a given product is

manufactured. This is especially true for very large numbers of units (e.g., many thousands),

at which point economies of scale apply. A generally accepted rule of thumb is that labor cost

associated with aircraft manufacturing is reduced by 10 to 15 percent as the number built is

doubled (Handy, 2013). Additionally, costs associated with nonrecurring expenses, such as

R&D investments and manufacturing tools, are spread among a larger number of units sold.

Thus, relaxing MTCR category I restrictions might result in more of these UAVs being built,

which would likely reduce the average cost of a category I UAV system.

However, it is unclear whether a reduction in unit cost to manufacture UAVs would be

passed on to U.S. buyers. Actual prices that manufacturers charge for high-value products,

such as UAVs, involve complex considerations that go beyond just manufacturing costs and

are proprietary. In addition, although relaxing category I UAV export control would likely

result in more category I UAV exports, these purchases could replace some category II orders.

A nation might order fewer category II UAVs if it purchases some category I systems and thus

influence a manufacture’s overall sales and pricing of future systems. The opposite is also possible

(i.e., maintaining the category I restrictions could, in some cases, motivate some nations

to purchase category II systems instead).

Overall, although we conclude that current export controls on UAVs can cause a higher

unit cost for U.S. customers, we cannot assess whether those cost savings would actually be

realized. Therefore, lacking supporting information, we assess this factor to be neutral.

Industrial Base

An increase in UAV manufacturing will help maintain and grow the UAV industrial base in

the United States. Conversely, a flat or decreased rate of manufacturing will likely result in the

eventual shrinking of the supporting industrial base. Although we are not aware of a comprehensive

study evaluating the impact that export control has on the U.S. UAV industry, we can

examine a closely related issue: the impact that export control has on satellite manufacturers in

the U.S. space industry. The U.S. Department of Commerce recently completed a deep-dive

assessment evaluating the effects that export restrictions on space-related technologies and

products have on U.S. industry. It found that export controls had significant adverse effects

on the industry, ranging from lost sales opportunities to contributing to the development of a

capable and competitive foreign space industry (Botwin, 2014). We expect that export controls

will have similar, if not more extensive, effects on the UAV industry. Therefore, we assess that

current controls have a negative effect on the U.S. industrial base.

Future Opportunities

Determining future opportunities for a current product involves several uncertainties, including

continued need of the benefit that the product provides and the possible development of

disruptive or alternative technologies that might better fulfill user needs. However, we expect UAVs of all sizes to be more widely used, provide more services, and replace and augment

manned aircraft. Current studies predict continued growth in UAV spending, with an increase

of more than 40 percent over the next five years (2017–2022) (Federal Aviation Administration

[FAA], undated, p. 65). In 2009, FAA created the Unmanned Aircraft Program Office to

integrate UAS into the NAS. FAA believes that the civil UAS markets will evolve and estimates

that roughly 7,500 commercial UASs would be viable five years after integration of UAVs into

the NAS (FAA, undated, p. 65). Companies in China and the UK have been planning and

working on cargo UAVs. Although the initial ones are advertised to not exceed the category I

threshold, they provide a clear path for larger, more-capable commercial cargo UAVs that

exceed the MTCR limits.5

General Atomics has been actively developing systems to enable the integration of UAVs

into the NAS and is scheduled to deliver the certifiable Predator B to the UK in 2019 (Carey,

2017). It meets NATO and UK certification requirements and is expected to be able to fly in

civilian airspace (Carey, 2017). Other nations are considering the integration of UAVs into

their NASs, and initial tests flying civil UASs in unrestricted airspace have already taken place

in Europe (Antunes, 2016). U.S. industry representatives indicated that the current MTCR

export restrictions will be a serious impediment to an anticipated future commercial autonomous-

freighter business. The MTCR also excludes codevelopment of category I UASs resulting

in potential opportunity losses in both commercial and military systems.

We assess that current export policy for category I systems has a negative impact on future

commercial and military opportunities. However, we cannot quantify the level of loss, so we

rate this factor as somewhat negative.

Research and Development

Sufficient R&D investments are needed to help maintain the lead position and future competitiveness

of U.S. industry. Export controls can have several consequences for R&D efforts,

potentially restricting investment for three reasons:

• R&D funding drops simply due to smaller budget availability. R&D expenditures are

typically based on a percentage of company product sales; smaller sales result in less funding

for R&D.

• Companies and other organizations, such as universities, will invest less R&D into products

they cannot export (Botwin, 2014, p. 36).

• The amount of R&D in which companies invest relates to the expected payback (i.e.,

market size for future products being considered). A smaller market—U.S. only—will

naturally result in smaller R&D investments.

The conclusions of the space study, from an R&D perspective, are consistent with the

feedback we received from UAV industry representatives. Thus, we conclude that export controls

could be reducing R&D investment.