



How to Prevent an Escalating Drone Arms Race

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One of the most significant changes in modern warfare has been the proliferation of Unmanned Aerial Vehicles, more widely known as drones. As recently as two decades ago, only a small number of countries — most prominently, the United States, United Kingdom and Israel — possessed military-grade drones that were capable of even limited military operations. Today, most countries with capable militaries have at least a token capacity to build and fly surveillance drones, and the drive to deploy armed drones is accelerating. According to a RAND study published in 2014, twenty-three countries were developing their own armed drones.

The proliferation of drone technology is aided by the booming export market, which enables countries that cannot afford to build their own to buy current and next generation models from other countries. In 2016, PricewaterhouseCoopers projected that the global market in drones would be worth \$127 billion by 2020. The world's leading drones exporters — including the United States, Israel, and to a growing extent China — occupy a commanding market position and can set rules that others will follow. If drone development and export is allowed to grow without strong regulations and norms, it will usher in a drone arms race that could encourage governments to undertake riskier actions than they would otherwise.

Drones and Martial Strategy

The central characteristic of drones — that they are unmanned, hence posing no risk of casualties to the user — tends to change the political-decision-making around their use in two ways:

- Countries and non-state actors with drones are using this technology to conduct incursions over their neighbors' territories, to test the neighbors' deterrence posture and see what type of action provokes an armed response. For example, U.S. and Chinese drones and manned aircraft have been conducting fly-bys of each other in South China Sea, to learn whether the other will defend Japanese control of the disputed Senkaku islands. Similarly, North Korea has been using crude drones to probe South Korea's deterrence posture especially near their demilitarized border.
- Countries can also use drones to coerce their enemies with limited strikes. Drones are potentially very attractive for this purpose, because they radically lower costs for the attacker, allowing power to be projected at lower levels of risk. It is possible to imagine scenarios in which governments threaten their enemies with repeated drone attacks in attempts to coerce them in important disputes. Especially when one side has a technological advantage, the potential for the use of drone-led coercion is likely to spread into conflict flashpoints around the world, such as South Korea versus North Korea or India versus Pakistan.

The Evolution of U.S. Policies

Despite the vast advantages that the United States has in drone technology, it has historically been slow to sell drones on the world market — in part because of the International Traffic in Arms Regulation law that requires State Department approval in advance of a sale, as well as the Arms Export Control Act of 1976 that designates “friendly countries” to which U.S. corporations can export products. In addition, drone exports have been restricted by the Missile Technology Control Regime, a voluntary agreement among 34 states that limits the sales and export of heavy payload weapons, and by the Wassenaar Agreement that requires participants to share information on deliveries, especially for dual-use technology.

However, in February 2015, the Obama administration announced a new policy allowing U.S. armed drone exports to foreign governments that agreed the technology would not be deployed for illegal purposes such as repression of the local population. In an effort to shape norms, the Obama administration also issued an October 2016 declaration supported by forty governments calling for compliance with international law, transparency, and voluntary standards for the import and use of drones.

In 2018, limits were further relaxed by the Trump administration, which eliminated some of the bureaucratic barriers on direct commercial sales to foreign governments and reclassified drones with strike-enabled technology as unarmed, thus making them easier to sell. More importantly, the Trump administration signaled a willingness to renegotiate the Missile Technology Control Regime to exclude drones. These steps will increase U.S. drone exports and spur the drone arms race.

Recommendations

Although the Trump administration is unlikely to limit U.S. drone sales or cede more of the market to Israel and China, it can still take three steps to limit escalation of a drones arms race:

- **Restore stronger end-use agreements:** The Trump administration’s policy weakens the requirement for end-use monitoring for drones sold under direct commercial licenses. Restoring restrictive end-use restrictions on commercial sales of U.S.-made drones and insisting on accountability for violations, including revoking foreign purchase rights if necessary, would restrain states from taking risky actions with the technology.
- **Limit sales of armed drones to countries not involved in ongoing interstate conflicts.** The Obama administration allowed sales only to NATO countries and close allies, but the Trump administration wants a wider pool of buyers. One way to ensure that drones are not misused is to demand a State Department certification that the foreign buyer is not involved in ongoing territorial disputes or active conflicts with its neighbors.
- **Convene an international task force to set norms on drone use.** Picking up on a late Obama administration effort that stalled, the Trump administration should call for a wide array of drone-producing countries to assemble an internationally-backed task force to set rules for drone export and use, especially in conflict zones.

Read more in Michael J. Boyle, *The Drone Age: How Drone Technology Will Change War and Peace* (Oxford University Press, 2019).