13 November 2014

Drone Proliferation: A Cause for Concern?

Is the growing proliferation of unmanned aerial vehicles (UAVs) an automatic security threat? Ulrike Franke doesn't think so. In her view, drones only become a problem when they are armed, used irresponsibly by states, or deployed by terrorists.

By Ulrike Franke for ISN

Drones appear to be everywhere at the moment, and the media loves to report on them. In recent years, the global market for drones has grown impressively and is forecasted to grow even more rapidly in the future. Only legal reform and some technical improvements (mainly a reliable sense-and-avoid technology) now stand in the way of large-scale commercial use. Moreover, an increasing number of armed forces around the world now use drones. Even ISIS puts videos on YouTube that are filmed with the help of a drone.

For many people, this sounds ominous. In particular, the rapid, international proliferation of military drones is a cause for concern. In a recent ISN article, Wim Zwijnenburg argued that new arms control regimes are needed to stop or curb the proliferation of military drones. "Today's arms control agreements", he claims, are not "comprehensive enough to regulate the growing investment in unmanned systems".

There certainly is nothing wrong with introducing new arms control agreements and strengthening existing ones. But the issue many articles on drone proliferation fail to address is *why* the proliferation of drones should be curbed. Why, exactly, is "the huge expansion of this technology", as Zwijnenburg puts it, a problem?

The answer to this question depends on definitions and circumstances. Some cases may appear straightforward (We can all agree that ISIS, for instance, should not have drones). However, in many cases, it is not actually the proliferation of drones that we should be concerned about.

The term 'drones', as it is currently used in the general media, refers to all kinds of unmanned aerial vehicles (UAV). [1] This includes UAVs that are remotely controlled from the ground, for instance via radio or satellite link, as well as those that can be pre-programmed to follow a flight path or carry out specific missions without guidance from the ground. Drones come in all shapes and sizes: both the tiny British "Black Hornet" as well as the notorious US "Reaper," which can carry an array of armament, are drones. *Military* drones are not the same as *armed* drones, albeit the former includes the latter. The designation 'military drone' simply refers to drones used *by the military*, for instance for surveillance and reconnaissance, but it also includes drones used for missile or bomb delivery.

Why are these distinctions important? Because a great deal of confusion exists, in debates over the proliferation of 'drones,' about what exactly is being discussed. Some even use this confusion to their advantage. What kind of drone proliferation, then, should we be worried about and why? While the possession of armed drones by rogue statues and terrorist groups is a cause for concern, the proliferation of drones *per se* should not be.

Terrorist groups and drones

The easiest case is the proliferation of drones to terrorist groups. We do not want ISIS (or any other terrorist group) to have drones of any kind. But this is true for all kinds of weapons. Is there a reason why it would be particularly threatening if terrorists had drones rather than other weapons?

At the moment, several terrorist groups appear to have small drones. Hezbollah [has flown](#) Iranian-built drones over Israeli territory several times since the early 2000s. This is an issue for Israel as these flights may provide the terrorists with information Israel would prefer them not to have, such as regarding the structure of their nuclear plants. But because these drones have so far been rather low-tech (indeed, it is unclear whether they were able to send back the data they collected in-flight or whether the data would have to be recovered manually after the drone's return), Israel's biggest concern is currently financial. In order to shoot down a drone which probably cost the Iranian government a few thousand dollars, it had to [send up](#) F-16 fighter jets and use guided missiles, causing costs of several hundred thousand dollars.

Hence, terrorist groups having unarmed drones is a concern, but not necessarily more so than terrorist groups having any other kind of military equipment. Terrorist groups can use drones to their advantage by improving their intelligence and causing financial losses to their adversaries. Beyond this, the biggest risk may be that a drone controlled by a terrorist group could cause panic among the population. But, in terms of unarmed drones, the main challenge is terrorism in general, rather than drones in particular.

The situation is different with respect to armed drones. Terrorists operating unmanned aircraft loaded with missiles or bombs would certainly pose a threat. For the moment, no terrorist group has been able to use armed drones.[2] Armed drones are currently (officially) produced only by Israel and the US, and both countries are strictly controlling the export of this technology, even to their allies. Some other states, namely Iran and China, have armed drone programs and will soon be able to produce armed drones that could potentially end up in the hands of non-state groups. Thus, while it remains difficult for a terrorist group to acquire armed drones, this is likely to change in the future.

Nevertheless, flying an armed drone is considerably more difficult than flying an unarmed drone. Armed drones tend to be large, sophisticated aircraft, while some unarmed drones can be controlled by iPhone applications and bear more resemblance to model aircraft than to weapon systems. [3] Although some smaller, easier- to- control armed drones do exist, these are 'kamikaze' systems whose explosive power is limited and that, in any case, can only be used once. This means that, on the whole, the possession of armed drones by terrorist groups is not a grave danger, at least at the moment.

[Some warn](#)that terrorists may use drones to deliver biological and chemical agents. This is of course a frightening prospect. But the problem in this scenario is not the drone but the biological and chemical weapons. A group that is capable of acquiring CBRN weapons is likely to be capable of delivering them in a variety of ways, and doing so with a drone is not necessarily more threatening than doing so by other means.

This analysis of the terrorism-drone nexus has shown that the main concern is not the proliferation

of drones *per se* but mainly the proliferation of armed drones. And this is equally true for states.

States and drones

At the moment, 76 countries are known or suspected to have military drones at their disposal.[4] Most of these states, however, only have unarmed drones. Should the proliferation of unarmed military drones (which is not only underway but has clearly already taken place) be a cause for concern?

While there are legitimate reasons to be wary, the proliferation of unarmed drones is not negative *per se*. The list of drone-states includes many regimes such as Iran and North Korea, whom many would prefer not to possess advanced military equipment. But drones are not the main problem here. As surveillance drones proliferate, both sides in military confrontations will have better information about their adversaries. This could potentially be a good thing as it could lead to attacks that are more targeted and result in fewer civilian casualties. Greater transparency also decreases the likelihood of dangerous misunderstandings.

The main hazard of unarmed drone proliferation is that because drones are unmanned, they may embolden leaders to attempt more politically daring missions than they would attempt otherwise. One example is China's recent use of drones over the Senkaku/Diaoyu Islands, disputed between China and Japan. The detection of a drone in foreign airspace or even the shooting down of a drone could cause diplomatic tensions and, in the most extreme case, could lead to war. Although this is a real danger, it rests upon the assumption that governments use drones in politically careless ways.

Some argue that the proliferation of unarmed drones could lead states to pursue armed ones. While there may be some truth to this, it also points to what most would consider the real problem: the international proliferation of *armed* drones.

For the moment, only three states – the US, the UK and Israel – officially have armed drones, but many other states have programs or are trying to import armed drones. This number is therefore likely to rise. Should we be worried about this? First, from the little empirical research that is available, it seems that armed drones are valuable military tools. As with all kinds of military equipment, therefore, we would prefer that potential enemies not acquire it.

Another challenge associated with the use of armed drones around the world is that other countries could start following the precedent set by the United States in using armed drones outside of declared warzones. The use by the US of armed drones for counter-terrorism purposes, especially the targeting of individuals in Pakistan, Yemen, and Somalia, has been criticised extensively in recent years. Worryingly, it might also be difficult to prevent other countries from following the US example, because the US precedent complicates any legal case against using armed drones in this way. Indeed, China in particular appears to be aware of this. In 2013, it announced that it had considered killing a drug trafficker in Myanmar with the help of a drone. Though Beijing ultimately refrained from doing so, the incident illustrates the world of possibilities that US policy has created.

The real problem: policy

On the whole, therefore, drone proliferation itself is not a problem that needs to be countered. Surveillance drones have already proliferated extensively, and the threat they pose is unclear to say the least. Furthermore, armed drones will soon be used in many countries around the world. For sure, this raises questions about *how* these armed drones are being used. But, ultimately, this is a *policy* issue. The drones themselves are not the main problem. Advocating a new arms control regime for drones when the problem lies elsewhere propagates the idea that the problem lies with

the technology – when, in fact, it lies with the policy.

For more information on issues and events that shape our world, please visit the [ISN Blog](#) or browse our [resources](#).

---

[1] Originally, the term 'drone' was used to describe a specific type of unmanned aerial vehicle, namely a pre-programmed system, often used for target practice.

[2] Some reports have claimed otherwise, but for the moment these claims cannot be confirmed.

[3] Of course, many unarmed drones are high-tech devices. The largest drone currently in use is the unarmed "Global Hawk", a drone the size of a commercial airliner and full of high-end technology.

[4] The exact numbers and an explanation of the methodology can be found at Franke, Ulrike Esther. "The Global Diffusion of Unmanned Aerial Vehicles (UAVs), or 'Drones'". In *Precision Strike Warfare and International Intervention: Strategic, Ethico-Legal and Decisional Implications*, edited by Mike Aaronson, Wali Aslam, Tom Dyson and Regina Rauxloh: Routledge, 2014. (Information as of September 2013).

Ulrike Esther Franke is a DPhil student in International Relations at Oxford University and focuses on the strategic implications of the increasing use of Unmanned Aerial Vehicles (UAVs or "Drones") by Western armed forces.

Publisher

[International Relations and Security Network (ISN)](#)

http://www.isn.ethz.ch/Digital-Library/Articles/Detail/?ots591=4888caa0-b3db-1461-98b9-e20e7b9c13d4&lng=en&id=185404

ISN, Center for Security Studies (CSS), ETH Zurich, Switzerland