



UNIDIR

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INSTITUTE FOR
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RESEARCH

Summary report

Tabletop Exercise on Armed UAVs

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About UNIDIR

The United Nations Institute for Disarmament Research (UNIDIR)—an autonomous institute within the United Nations—conducts research on disarmament and security. UNIDIR is based in Geneva, Switzerland, the centre for bilateral and multilateral disarmament and non-proliferation negotiations, and home of the Conference on Disarmament. The Institute explores current issues pertaining to a variety of existing and future armaments, as well as global diplomacy and local tensions and conflicts. Working with researchers, diplomats, government officials, NGOs and other institutions since 1980, UNIDIR acts as a bridge between the research community and Governments. UNIDIR activities are funded by contributions from Governments and donor foundations.

Note

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KEY TAKEAWAYS

- During the exercise, each fictitious State actor attached different meanings to the use of armed UAVs in an armed conflict. In a real-world setting, this could give rise to misunderstandings and miscalculation by one or both parties.
- States who suffer armed UAV incursions may attach more significance to these events than intended by an armed UAV user. If seeking to intentionally escalate a conflict, affected States may use such incursions as justification for aggressive countermeasures. Alternatively, States intending to avoid escalation may downplay the significance of such events.
- The calculations surrounding the use of armed UAVs will depend on the context. When UAV use is considered in a potential inter-State conflict, restraint may predominate. During complex civil wars involving external neighbouring States, armed UAV use may be a preferred over manned aircraft.
- By the end of the exercise, there was a significant shift among participants towards the view that international dialogue on armed UAVs was not sufficiently focused on the correct topics. This sample of multinational practitioners suggests that States have not thought systematically about what consequences the proliferation of armed UAVs will have for international stability.
- An increased focus in international discussions on the use of armed UAVs, the risks involved, potential norms for their use and greater transparency concerning their transfer, proliferation and use could therefore benefit the international community.

1. CONTEXT

Since 2016 UNIDIR has carried out research and hosted a series of events on the use and proliferation of armed unmanned aerial vehicles (UAVs) or "armed drones".¹ These efforts built upon concerns identified in 2015 by the Acting High Representative for Disarmament that armed UAVs:

have unique characteristics that make them particularly susceptible to misuse in comparison to other technologies. These include their low costs, which can aid their rapid proliferation; their loitering persistence and precision, which can tempt covert armed forces and non-State actors to use them secretly and without appropriate transparency, oversight and accountability; and the minimal risk to their operators, which can lower political thresholds for the use of force.²

One of the key challenges to focusing international discussion on armed UAVs is a lack of consensus regarding whether their features do enable new military practices. As highlighted during a workshop that UNIDIR convened in April 2018, States deploying armed UAVs contend that that they are being used in the same way as other conventional weapons. Similarly, many of those States looking to acquire armed UAV capabilities assert that if they were to deploy these systems in the future, they would task them in the same way as manned aircraft. In order to encourage States to consider whether the unique characteristics of armed UAVs enable distinct military practices, UNIDIR facilitated a one-day exercise to explore armed UAV use scenarios in Geneva on 20th November 2018.

2. TABLETOP EXERCISE: OBJECTIVES AND STRUCTURE

The tabletop exercise was intended to help illuminate how decision makers might consider the use of armed UAVs in two different types of crisis or conflict situations. It also served to engage a small group of diplomats and military advisers currently engaged in arms control diplomacy in in-depth consideration of the factors at play in decisions to use or refrain from use of armed UAVs. Participants appeared to have a varied understanding of the capacities of armed UAVs although the group included two more informed military advisers. The exercise was prepared by an eminent expert on the use of armed UAVs, in cooperation with UNIDIR researchers.³

Participants engaged in two distinct scenarios in which use of armed UAVs was an available option:

- An **inter-State dispute** between two States over a disputed island territory in a resource rich maritime environment. The dispute involved a rising regional power with robust military capacities and a long-standing regional power with a small but modern military.
- A **complex civil war** in a "buffer State" between an ethnic majority and government of the same ethnicity as its neighbouring State to the north and a minority that shares its ethnicity with a southern neighbour State. Although the buffer State's military is of mixed ethnicity, this changes in the course of the civil war with the ethnic majority dominating and soldiers of other ethnicities fleeing to defend an increasingly small territory on the southern border.

¹ See the UNIDIR research project on Increasing Transparency, Oversight and Accountability of Armed Unmanned Aerial Vehicles (Phase II), <http://www.unidir.org/programmes/security-and-society/increasing-transparency-oversight-and-accountability-of-armed-unmanned-aerial-vehicles-phase-ii>.

² J. Borrie, E. Finckh and K. Vignard, "Increasing Transparency, Oversight and Accountability of Armed Unmanned Aerial Vehicles", UNIDIR, 2017, p. 2, <http://www.unidir.org/programmes/security-and-society/increasing-uav-transparency-oversight-and-accountability>

³ Paul Scharre, author of *Army of None: Autonomous Weapons and the Future of War*. Scharre is a Senior Fellow and Director of the Technology and National Security Program at the Center for a New American Security, and a former US Army Ranger.

Over the course of a day four teams of participants played the roles of one State each, facing off in pairs against opposing States. Two opposing sets of participants played through both of the scenarios described above. Each move by a team was reported to a control group led by an external expert. The group then developed a response based on real-life scenarios and reported the latest response or developments to the opposing side to consider their next moves. Teams were asked to explain their perceptions of the other side's moves and the rationale for their own actions during a debriefing after each scenario. In each scenario, armed UAVs were an available option, but the teams of participants were not compelled to deploy them.

A survey of participants' views on six key issues related to armed UAV use was also conducted before and after the exercise. After the exercise, a significant change was recorded towards the view that the international dialogue on use of armed UAVs was insufficiently focused on the correct topics. This suggests that the exercise raised specific issues emerging from the use of armed UAVs that participants had not previously considered.

3. BEHAVIOUR OF TABLETOP ACTORS

Inter-State dispute

In this scenario all parties were told to avoid actions that would result in direct inter-State armed conflict while fully defending their State's territorial claim to the disputed island and the surrounding 12 km territorial waters/airspace.

Only one of the teams deployed an armed UAV in the course of this scenario and none used the UAV in an armed attack. Reasons given for doing so were that its deployment would provide better surveillance capacities than aircraft or surface vessels and the fact that it was less risky in terms of potential loss of life than crewed vessels or aircraft (which could result in domestic pressure for escalation).

Reasons given for the non-deployment of UAVs by other teams included (a) the belief that UAV deployment would send only a weak signal of sovereignty claims as compared to other military assets, (b) the risk that the UAV may be shot down, leading to escalation, (c) a hesitancy to introduce military assets in response to non-military actions (the establishment of a meteorological station) by the other side, and (d) the availability of other options to address the situation, including satellite monitoring, jamming and aircraft (which would better signal intent).

Complex civil war

The civil war scenario led to the deployment and use of armed UAVs by three of the four fictitious neighbouring States involved in the conflict as well as by the government of the State engaged in the civil war. In both cases, government forces with support of their ethnically affiliated northern neighbour State managed to drive rebel forces of other ethnic groups out of the vast majority of national territory. The one team representing the neighbouring State associated with minority ethnic groups did not deploy armed drones. Instead it chose to openly deploy its military advisers on the ground as a clearer way of demonstrating that an attack on such advisers might trigger the engagement of the State itself.

Parties that employed armed drones in the conflict cited a variety of reasons, including (a) the reduced risk of pressure for escalation if a drone rather than a crewed aircraft is shot down and associated freer hand in choosing response options, (b) the use of crewed aircraft would have been less "anonymous" thereby more directly implicating the neighbouring State in the civil war, and (c) in light of these potential benefits, that it would be easier to conduct a "proxy war" with armed UAVs. The party that refrained from introduction of armed UAVs in support of minority fighters was

also influenced by their (and its) weak position and by hopes that the Security Council of the United Nations would call for a ceasefire in the conflict.

In discussions following the exercises several participants expressed the view that key decision makers in their context probably were little concerned with the choice of weapon system (armed UAVs or military aircraft) and were probably unaware of the different implications of each choice.

4. KEY INSIGHTS AND OBSERVATIONS

- Each fictitious State actor attached different meanings to the use of armed UAVs in an armed conflict—a factor that can give rise to misunderstandings and miscalculation by one or both parties. While one party may see an attack with, or loss of, an armed UAV as a highly significant event meriting an aggressive response or escalation, another may see it as a very limited provocation or simple material loss.
- An actor seeking to escalate a conflict may choose to attribute a high significance to a UAV attack or incursion by an adversary as a reason to mount an aggressive response whereas another, intending to avoid escalation, may downplay the significance of such events as compared to the use of conventional ground forces or crewed aircraft.
- Very different calculations appear when UAV use is being considered in a potential inter-State conflict, where restraint may predominate, as compared to a complex civil-war scenario involving interests of external neighbouring States where armed UAV use may be a preferred option. In such cases armed UAVs may be seen as a tool by which a neighbouring State can influence events while avoiding engagement of ground forces or crewed air platforms that would involve increased risks.
- The fact that participants viewed the international debate on armed UAVs to be less focused on the correct issues after the exercise suggests that a lack of concern about international standards relevant to the transfer and use of armed UAVs may derive from the fact that States may not have systematically considered the consequences that armed UAV proliferation will have for international stability rather than because it does not raise significant concerns.
- Existing differences in perceptions involving the use of armed UAVs can be destabilizing and lead to unintended consequences. This highlights the value of an increased focus in international discussions on the use of armed UAVs, the risks involved, potential norms for their use and greater transparency concerning their transfer, proliferation and use.



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