

Who is liable when an autonomous military drone causes unintended harms?

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Suppose that the ADF procures an autonomous uncrewed aerial vehicle ('UAV') for delivery of goods whilst deployed during humanitarian operations overseas. The UAV is unarmed, but carries sensors capable of determining if it is under attack and can take evasive action. During one such deployment, the UAV is delivering medical supplies on a humanitarian assistance mission in the region after a cyclone when a megabat collides with the UAV, damaging its GPS. The UAV erroneously believes it has come under attack and, confusing its location, accidentally crashes into a home harming several people.

Who is responsible for the harms to property and people in this instance? What should the ADF know about domestic and international law ahead of procuring UAVs like these from manufacturers? What questions should they ask and what kinds of precautions should they take before deploying assets operationally?

In the Australian context, there are two sources of laws which impose obligations on manufacturers of military equipment including this UAV flown in international territory. The first is the common law, made up of judgments and decisions by Australian and international courts. The second is statutory law, the Acts passed by Australian Parliament and enforced by the courts.



For manufacturers of AMS, the provisions of statutory law (including the Australian Consumer Law or ACL) will have the most impact on their operations. Whilst the common law will still apply, it has a much narrower application because the common law:

- creates a duty of care generally limited to the end users of the equipment (usually the ADF and/or its soldiers, sailors, airmen and officers);
- is limited in its application to third parties outside of the ADF, such as civilians; and
- is subject to wider defences based on a test of reasonableness, such as showing the manufacturer took “reasonable” steps to protect persons from harm, and/or that the harm that resulted was not “reasonably foreseeable”.

Otherwise, it is important to recognise that under either law:

- operations against the enemy by the ADF attracts combatant immunity or combatant privilege, and so are not actionable;
- Australian courts may still decline jurisdiction in cases where it would be “clearly inappropriate” to do so.

The ACL was originally passed in 2010 to create a binding framework to protect consumer safety and punish unconscionable seller behaviours. To sue under the ACL, a plaintiff only need prove the existence of a “safety defect”, which only requires proof that “their safety is not such as persons generally are entitled to expect”, and where that defect causes harm, loss or injuries.

The ACL will apply to military contractors, as:

- use of the word “goods” in the ACL explicitly includes references to ships, aircraft, vehicles, components, software and subassemblies; and
- the ACL applies to the conduct of any corporation (whether incorporated domestically or internationally)

Companies that fail to prevent safety defects in their AMS could face the issue of damages, compensation orders, or orders to remediate or redress any harm or loss suffered by the plaintiff.

For the crashed UAV landing overseas, Australia is an appropriate forum to hear any claims, and the action was not being taken in the course of “actual operations against the enemy”.

The UAV was provided in trade or commerce and requisite proof of harm — either consisting of death or personal injury, or destruction/damage of a residence — is also uncontroversial.

A manufacturer will be able to resist liability if they can demonstrate that the defect was not present at the time of delivery to the military, or alternately that the defect was only detectable by some process or technology that was not available at the time of manufacture.

In this case the megabat collided with the UAV. It might be argued that the GPS unit was not sufficiently robust to withstand a direct physical altercation (see arguments regarding the fragility of the angle-of-attack (AOA) sensor feeding data to the MCAS system on the 737 Max). The manufacturer should predict collisions with objects including flying animals and ensure safety critical systems such as GPS were resilient under such events.

The “safety defect” will have different ramifications if the safety defect was for example the result of a carelessly wired sensor (a manufacturing defect) versus a poorly chosen sensor (a design defect).

The manufacturers of UAVs will continue to attract liability where it is produced negligently or contains safety defects, irrespective of whether the manufacturer is ordinarily registered in Australia, or that the products are purely military in nature.

ADF personnel in charge of procuring or deploying UAVs need to be aware of the legal frameworks that govern their use and potential liabilities when incidents occur. ●



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