

Drone Warfare, by John Kaag and Sarah Kreps, Cambridge:
Polity Press, 2014, pp. 195, \$19.95

*S.K. Dey**

Drones are unmanned aerial vehicles (UAVs) that can carry a payload for the purpose of reconnaissance and surveillance; and those that are armed with missiles and bombs carry a payload for combat use. So, in drone warfare a human being, that is, a pilot flying an aircraft, is unnecessary and his life is not put in danger over the enemy territory. In military technology, drones represent precision weaponry and the rise of robotics. Drones were not armed at all till the 1990s. They were only used as unmanned sensor aircrafts with predators operating in Bosnia, Kosovo and the no-fly zone in Iraq. When the debates started between the United States (US) Air Force and Central Intelligence Agency (CIA), whether to have fast jets or drones, both expressed an interest in going beyond gathering intelligence and acquiring an aircraft that could both track and kill suspected targets. In this book, the authors have brought out the realm of unmanned warfare tactics—especially the drones—in totality, in terms of political, legal and moral efficacy, and provide an assessment of dangers of the current policy trajectory.

After 9/11, the US took up targeted killings by drones. According to Kaag and Kreps, the authors of this book, the US started deploying MQ-1B Predator and MQ-9 Reaper armed with precision-guided munitions to match their adversaries' flexible tactics. The US now has around 7,500

* Wg Cdr S.K. Dey (Retd.) served in Indian Air Force in the AE(M) Branch as Technical Officer. He has keen interest in technological developments in the Indian armed forces.



drones, while a decade ago they had but a few dozen. This shows the keenness to use drones for pinpointed targets where the need of human soldiers is negated. In 2001, Hellfire missiles were fitted onto a surveillance drone and that was the beginning of the use of combat drones. The use of such drones has resulted in the elimination of many al-Qaeda leaders.

Drone Warfare is divided into six exclusive chapters, each of which provides a comprehensive, timely, rigorous, accessible analysis of the use of combat drones in modern warfare. The authors' alarm was elicited not by the technology itself, but by the way the research and development of this technology outpaced the studied considerations of its implications. *Drone Warfare* reminds us that human judgement will be an inescapable part of the drone age. This book is an attempt to begin a difficult debate on the fact that, when it comes to drone warfare, practical, systematic, careful thinking is what is needed. There is a complex relationship between the politics, the law and the morality of drone strikes, and it is a relationship that remains largely overlooked in the current debates about modern asymmetric warfare. It will require consulting experts who seem to have nothing to do with military tactics: political theorists, applied psychologists, legal theorists as well as the occasional ethicist.

In the introductory chapter, 'The Rise of Drones', the authors have given the initial use of UAVs for non-combat purposes, and how the technology and the research as well as the growth of robotics have evolved in last decade. They also document the move towards combat missions on precision targets either killing individuals or mass killings. The book quotes the Obama administration's spokesperson, Jay Carney, clearly stating that 'Drone strikes are legal, they are ethical and they are wise.' The countries that use drones for combat purposes, other than the US, are the United Kingdom (UK) and Israel. For the implications of the use of drones, the authors hope that scholars, politicians, military planners, and, most importantly, citizens will be part of the debate on use of drones, thereby questioning political, moral and ethical issues.

In the second chapter, 'The Nuts and Bolts of Drones', the authors have lightly touched on the various categories of drones. The drones are classified on their payload-carrying capacity, flight endurance, the various altitudes at which they can operate, the geographical range as well as their precision capability. Some of the key features mentioned about the US MQ-1B Predator are: capability to undertake aerial reconnaissance, surveillance and target acquisition; payload of 3,850 pound-mass (lbs); range of upto 770 miles; maximum endurance of 27 hours; maximum

altitude of 50,000 feet; and the fact that it is armed with two laser-guided AGM Hellfire missiles. Whereas the MQ-9 Reaper is a killer weapon system, with a payload of 3,750 lbs, range of upto 1,150 miles, maximum endurance of 14 hours, maximum altitude of 50,000 feet, and it comes armed with combination of AGM 114 Hellfire missiles and GBU-12 and 38 Joint Direct Attack Munitions. This, in brief, gives the intensity of their effect. It is mentioned that between 2008 and 2012, there were about 1,200 coalition drone strikes in Afghanistan. Later, drone strikes declined in Pakistan but increased in Yemen. Drone attacks resulted in many civilian casualties initially, although these declined later on.

The third chapter, 'Drones and Democracy', encapsulates the thematic debate part of this book. It suggests that certain forms of US drone warfare have compromised democratic accountability. The citizens of a country want to be protected, and therefore encourage their elected government to develop technologies that will reduce the cost of war in blood and money. Drones have played this part very nicely by limiting troop involvement in campaigns since the invasion in Afghanistan over 10 years ago. However, shielding citizens from the cost of war potentially decouples the democratic process whereby the leaders must seek public approval for military campaigns. This is good domestic politics. A few polls do query individuals about combatant status and hint at individuals' concerns with whether drones are harming innocent civilians. The book contains some tables showing public opinion surveys (see Tables 3.1 and 3.2). The tables show that a large percentage of people are concerned that drones are harming civilian population. The authors further discuss whether and when to use foot soldiers or the drones is a decision made by the US President and the US Congress by showing the American people the cost of war.

The fourth chapter, 'Drones and International Law', draws attention to international law, mainly the two components of the legal critique of drone use in combat. The first violates *jus ad bellum*—the recourse to war—because the US used drones in Pakistan, Yemen and Somalia when it was not at war with any of these states but rather with a non-state actor, the al-Qaeda, within these territories. Second, the use of drones potentially violates *jus in bello*, that is, the law governing conduct of war. Here, the authors have quoted the Obama government's clarifications regarding the use of drones. The authors note that assessing proportionality in best of cases poses problems given the difficulties of distinguishing combatants from civilians, and in anticipating military

advantage relative to civilian damage. When goals are cast in such open-ended ways, military advantage can encompass almost anything, and can justify almost anything as a proportional measure. The authors have also touched upon many international legal mechanisms such as the Geneva Conventions, where the distinctions between combatants and civilians have been debated.

The fifth chapter, 'The Ethics of Drone Warfare', deals with the ethics of using drones to target suspected terrorists. The authors feel that the use of drones creates a moral hazard, in which the countries using drones have an incentive to undertake the risky behaviour of targeted killing because technology shields them from most of the adverse consequences. Also, the authors have discussed some issues in detail: moral hazards of drone use; war by remote control; technology and ethical reflection; the banality of evil revisited in the case of drones; technological rationality and its impact on just war theory; and collateral damage blurring the fact-value distinctions. The authors mention that the highly automated nature of tomorrow's warfare will place soldiers who operate these weapon systems in a position to squarely confront this moral hazard with unprecedented clarity.

In the concluding chapter, the authors highlight the unprecedented strategic choices that the US currently faces with respect to its drone capabilities. They also propose that the US should go ahead with proposing an international agreement with regard to the legitimate use of drones, with more restraint and with transparency in terms of compatibility between targeting decisions and the ethical and legal commitments. The drone age is upon us now, and the authors welcome the obvious advantages that modern military technology such as drones provide in fighting just wars. The political, moral and ethical aspects are always to be kept in mind while taking the advice from the US Congress to go ahead in a particular engagement of war. The authors have taken all the analysis and data from the US perspective as that is the only country to have engaged in drone warfare in a maximum number of missions abroad.

This book would interest readers who follow modern warfare, mainly hi-tech war technologies such as drones. It deals, in detail, with the technology of drones and the use; how the US has shifted its war doctrine; and what political, moral and ethical issues arise vis-à-vis the government and the public in using the UAVs for combat purposes.