

# THE IMPACT OF DRONE INNOVATION

## EXECUTIVE SUMMARY

The drone was first invented and developed for military purposes. The first drone was a kind of kamikaze design which was an aircraft flown remotely by an operator, which was itself a weapon, the drone was destroyed on impact. The drone was then gradually developed over the years into what we see today in the *Predator* and *Reaper* drone systems. These drones are now linked to an operator through satellite connection far away from the battlefield. Sometimes the drones are armed with laser guided missiles, but most of the time they are used for surveillance.

Most people, when they hear the word drone, imagine the military version. More recently, however, the commercial rotary drone has grown in popularity. These drones have a very bright future, they can be used in surveillance, agriculture, search and rescue, fighting forest fires, and most commercially promising, in video recording.

The social impact of commercial drone innovation is making the lives of everyone in society easier and safer. Businesses are eager to pave the way for drone technology and to start tapping into its vast economic potential. Considering the politics of drone implementation however, people are worried about their rights and freedoms being encroached upon. Due diligence on drafting a proper legal structuring surrounding commercial drones needs to be assured.

Military drones are a different story. The economic impact of drones is already well felt in society as these drones have been around for over a decade. The political concerns in the United States surround abuse, due to the consolidation of power to the executive branch and intelligence agencies. These government elements make the decisions based on criteria that are held secret from the public and other branches of government. Leaked information from the Snowden documents as well as *WikiLeaks* suggests that there is an abuse of power. These documents are substantiated by stories from investigative journalists who have been on the ground in the regions where strikes have occurred and interviewed those affected. The social impact is well captured by looking at the killing of Anwar al-Awlaki and his 16-year-old son Abdulrahman. They were American citizens killed without due process or proper justification. The evidence against Anwar al-Awlaki and his son has not been released due to the government invoking the State Secrets Act, which claims to protect national security.

The future of drone technology includes a successor to the SR-71 Blackbird with a drone that can fly at speeds up to Mach 6 and drones the size of insects, which can be used for assassination. China and Russia, as well as other countries are catching up to America and Britain in drone technology and it is recommended that a proper legal framework be established before there are even bigger problems than we currently face. Public pressure on policy makers is the only way that progress will be made in this area. It is strongly recommended that the reader push for information to be released on drone strike criteria as well as strict regulation and proper oversight of both military and civilian drones.