Emerging Asymmetric Threats to Mankind in the Face of Drone Technology

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Unmanned Aerial Vehicle (UAV), Remote Control aircraft (RC), drone and several other names refer to an aircraft without a human pilot aboard. A UAV or a drone is most often equipped with cameras or other sensors in order to collect assorted data. Domestic drones are commonly used by hobbyists as well as by those interested in them for commercial and industrial purposes such as photography and video filming, agriculture, safety and law enforcement. At present, due to the technological advancement in this field, the application of drones for various purposes is increasing. Therefore, the possibility of adversaries/non-state actors using drones to threaten the national security is an emerging factor that needs to be countered. The objectives of this research is to find out the capabilities of drones and applications which create threats to the national security and to analyse available counter measures and relevant policies, rules and regulations in the country. The research methodology is based on the qualitative approach and a descriptive research based on survey method is followed. In this research, the capabilities of modern commercially available drones with range, endurance and payload capacity are analysed, and possibilities of threats where drones can be utilised by belligerents are evaluated. Further, available counter measures and policies, rules and regulations in Sri Lanka and in some other countries are examined for better understanding. In the data analysis and findings, possible modes of operation by the adversaries using commercial drones have been identified. Recommendations are based on the finding to update and implement the existing regulation in the country. Concluding remarks include the positive side as well as the negative impact of the development drone technology.

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