The Future of Drone Use

Opportunities and Threats from Ethical and Legal Perspectives
# Contents

## Part I  Introduction

1. **Drones Here, There and Everywhere Introduction and Overview**  
   Bart Custers  
   p. 3

2. **Drone Technology: Types, Payloads, Applications, Frequency Spectrum Issues and Future Developments**  
   Bas Vergouw, Huub Nagel, Geert Bondt and Bart Custers  
   p. 21

3. **Big Data, Drone Data: Privacy and Ethical Impacts of the Intersection Between Big Data and Civil Drone Deployments**  
   Rachel Finn and Anna Donovan  
   p. 47

## Part II  Opportunities and Threats

4. **Deliveries by Drone: Obstacles and Sociability**  
   Sally A. Applin  
   p. 71

5. **Policing from Above: Drone Use by the Police**  
   Bart Engberts and Edo Gillissen  
   p. 93

   Luisa Marin  
   p. 115

7. **The Humanitarian Use of Drones as an Emerging Technology for Emerging Needs**  
   Tomas Martini, Michele Lynch, Abi Weaver and Tamieck van Vuuren  
   p. 133

8. **Terrorism and National Security**  
   Sofia Michaelides-Mateou  
   p. 153
### Part III Ethical Issues

9 **The Humanization of Drones: Psychological Implications on the Use of Lethal Autonomous Weapon Systems** ........................................... 173  
David Bergman

10 **Unmanned? The Bodily Harms and Moral Valor of Drone Warfare** ............................................................................................................ 189  
Nicholas R. Brown

11 **Victims of Drone Warfare: Stretching the Boundaries of Conflict; Ethics and Remote Control Warfare** ........................................... 209  
Wim Zwijnenburg and Zorah Blok

12 **Drones, Morality, and Vulnerability: Two Arguments Against Automated Killing** .......................... 229  
Mark Coeckelbergh

### Part IV Legal Issues

13 **Key Provisions in Current Aviation Law** ........................................... 241  
Benjamyn Scott

14 **Civilian Use of Drones as a Test Case for the Right to Privacy: An Israeli Perspective** .................................................................................................. 261  
Uri Volovelsky

15 **Access to an Effective Remedy and Reparations for Civilian Victims of Armed Drone Strikes** ........................................................................ 289  
Quirine Eijkm an and Marlieke Bakker

16 **A Comparative Global Analysis of Drone Laws: Best Practices and Policies** .................................................. 301  
Timothy Ravich

### Part V Conclusions

17 **Making Drones More Acceptable with Privacy Impact Assessments** ........................................... 325  
David Wright and Rachel Finn

18 **The Public Acceptance Challenge and Its Implications for the Developing Civil Drone Industry** .......................................................... 353  
Alan McKenna

19 **Flying to New Destinations: The Future of Drones** ........................................... 371  
Bart Custers