Assessment of the use of uncrewed aerial systems in forensic investigations

Explore the use and value of uncrewed aerial systems (UAS), also known as drones, in forensic investigations.

Key details

Lead institution	University of Derby
Principal researcher(s)	Clare Barrett c.barrett14@unimail.derby.ac.uk
Police region	East Midlands
Collaboration and partnership	Derbyshire Constabulary
Level of research	PhD
Project start date	June 2023
Date due for completion	June 2026

Research context

In the ever-evolving landscape of law enforcement, the integration of new technologies is important for enhancing the efficacy, efficiency and adaptability of policing and forensic practices. Uncrewed aerial systems, also known as drones, are an example of developing technology, offering opportunities to increase policing capabilities and address some of the challenges of modern crime.

Drones are used in policing activities – however, implementation is force-specific, and there is currently no evidence-based approach to support and develop the use of drones within forensic services. This PhD research aims to explore the current landscape of drones within policing and

forensic services, examining the potential impacts of this technology on forensic investigations and comparing this to other methods and technologies.

This exploration should lead to provision of research-led guidance and an evidence-based approach for deployment and use of UAS in forensic investigations, resulting in more cost-effective, streamlined and consistent investigative services with a positive effect on court proceedings.

Research methodology

This research adopts a mixed-methods approach in three stages.

- 1. Exploration of current practice literature review, international survey, interviews and policeprovided data.
- 2. Experimentation simulation forensic scenes and scenarios that test various modern technologies (drones, scanners, phones, etc.) under different circumstances.
- 3. Interpretation use of software to process collected data and input from participants to interpret processed experimental data.

Research participation

The researcher is seeking volunteers to participate in an online survey about the use of drones and similar modern technologies in policing and forensic services. Participants should be field-based forensic practitioners or emergency service drone operators.

The survey will take approximately 15 to 20 minutes to complete.

Participation is voluntary and responses are confidential and will be anonymised. There is a 'prefer not to say' option for all questions. Ethical approval has been provided by the University of Derby.

If you are interested in participating in this study, please complete the online survey.