

Analysis of the use of working dogs in compound searches: operational practices and alignment with the UK counter-terrorism (CONTEST) strategy

Examines the role and effectiveness of police and military working dogs in compound searches within the UK's CONTEST strategy framework.

Key details

Lead institution	Cranfield University
Principal researcher(s)	Connor Janes Connor.Janes.321@cranfield.ac.uk
Collaboration and partnership	<ul style="list-style-type: none"> • Cranfield University • 1st Military Working Dog Regiment • a selected police constabulary
Level of research	Masters
Project start date	April 2025
Date due for completion	January 2026

Research context

The use of working dogs within police and military operations has evolved significantly over the past century, becoming an essential capability for modern security and counter-terrorism efforts.

Within the UK, dogs are a core component of policing and defence strategy, particularly in specialist areas such as explosive detection, narcotics, and structure search operations. These capabilities align closely with the UK Government's CONTEST strategy, which outlines four pillars

(prevent, pursue, protect, and prepare), designed to reduce the risk of terrorism and strengthen national resilience.

Working dogs support several of these pillars by detecting threats, protecting critical infrastructure, and assisting in proactive search and prevention operations. The value of canine assets lies in their unmatched olfactory sensitivity, mobility, and adaptability. Despite the increasing use of technology, such as electronic sensors and robotic platforms, dogs continue to be regarded as the “gold standard” in many search scenarios. Their ability to detect trace odours in complex environments, combined with the handler’s ability to interpret and direct their behaviour, provides a level of operational flexibility that current technology cannot replicate.

This research is situated in a period of renewed focus on national security and counter-terrorism preparedness, following evolving global threats and the integration of new technologies into policing. It seeks to explore:

- how working dogs are deployed within structure searches
- how their use aligns with existing doctrine and ethical frameworks
- how they complement or contrast with emerging technological alternatives

Understanding this context not only reinforces the continued relevance of working dogs but also contributes to discussions on operational effectiveness, welfare, and future capability development.

This study will provide an evidence-based perspective on the enduring and evolving role of working dogs within UK security operations, framed against the strategic objectives of CONTEST.

Research methodology

This project adopts a mixed-methods approach, integrating literature analysis and practical participation, to explore the operational effectiveness of police and military working dogs in compound search environments. The overarching aim is to evaluate their performance and alignment with the UK’s CONTEST counter-terrorism strategy.

The desk-based research element draws from academic studies, policy documents, and official guidelines, to provide a framework for understanding how working dogs are deployed, accredited, and integrated into operational search strategies.

The practical component of the project involves the observation and assessment of a controlled structured search exercise, using a trained detection dog team. This exercise replicates a realistic search environment and is used to document search patterns, handler and dog communication, and the influence of environmental conditions such as airflow, heat, and scent diffusion.

Observations are supported by digital mapping to enable review and performance analysis. All participation is voluntary, with informed consent obtained and data anonymised to ensure confidentiality and ethical compliance. Together, these methods provide a comprehensive understanding of the doctrine, practice, and human/animal partnership underpinning structured search operations. The inclusion of both practitioner perspectives and practical observation ensures that conclusions are grounded in operational reality as well as academic evidence.