

## Royal United Services Institute

By Elizabeth Quintana

The Royal United Services Institute (RUSI) is an independent think tank engaged in cutting edge defence and security research. A unique institution, founded in 1831 by the Duke of Wellington, RUSI embodies nearly two centuries of forward thinking, free discussion and careful reflection on defence and security matters.

RUSI is a British institution, but operates with an international perspective. Satellite offices in Doha and Washington DC reinforce our global reach. We have amassed over the years an outstanding reputation for quality and objectivity. Our heritage and location at the heart of Whitehall, together with our range of contacts both inside and outside government, give RUSI a unique insight and authority.

RUSI provides corporate and individual membership packages offering exclusive access to the UK's premier forum on defence and security. Through our publications and events, RUSI members benefit from authoritative analysis, insight and networks. RUSI is renowned for its specialist coverage of defence and security issues in the broadest sense. Our expertise has been utilised by governments, parliament and other key stakeholders.

The adoption of unmanned or remotely piloted systems has provided military forces a step change in capability expanding surveillance capabilities, providing force protection and undertaking dangerous missions such as explosive ordnance disposal. They have proved enormously popular with Western forces since their inception in Bosnia through operations in Iraq and Afghanistan and saved countless lives. Despite this, the integration of UAS is still fraught with difficulty. A number of key questions remain:

- Who should operate UAS and what kind of skills do they need?
- What kind of support structure do UAS require?
- Are UAS truly cheaper to operate than manned aircraft?
- What is the correct balance of manned/unmanned platforms?
- How can military forces better manage the 'data crush' and maximise the usefulness of imagery or streaming video produced by UAS?
- Can UAS be integrated into civil airspace?

- Will UAS undermine military ethos?
- Is it ethical to allow fully autonomous systems to operate as part of a military force?
- Do UAS alienate the local population and thus undermine the strategic objectives of the operation?
- Is Europe's industrial base correctly structured to supply UAS into the future?

RUSI is addressing these and other concerns as it helps the UK Ministry of Defence, US Army and other military organisations develop their concepts and doctrine. It is closely linked to industry and academia. RUSI has produced a number of reports over the years, and articles regularly appear in our publications. We undertake bespoke research and convene both public and private events to promote better understanding of the issues as they develop in this sector. We would be delighted to help you develop your thinking.

RUSI has published the following UAS-related publications:

- Ethical & Legal Implications of Unmanned Systems - Elizabeth Quintana, Occasional Paper 2008
- Unmanned Combat Air Vehicles: Opportunities for the Guided Weapons Industry? - Michael Franklin, Occasional Paper 2008
- Unmanned Vehicles: Operational Challenges - Claire Button, Battery Commander, 18 (Quebec 1759) Battery Royal Artillery, RUSI Defence Systems June 2009
- Unmanned Vehicles: Fighter Pilots or Geeks? - Peter Almond RUSI Defence Systems June 2009
- Unmanned Vehicles: Unmanned Systems for LCS Missions - Edward Lundquist RUSI Defence Systems June 2009
- Unmanned Vehicles: The Case for New Programmes - Dr Robbin Laird, RUSI Defence Systems June 2009
- Unmanned Vehicles: Drivers are Optional - John Beck, RUSI Defence Systems June 2009
- Deep Impact: The Effect of Drone Attacks on British Counter-Terrorism - RUSI Journal Oct 2009, Vol. 154, No. 5 By Raffaello Pantucci

For more information, please visit [www.rusi.org](http://www.rusi.org) or contact Elizabeth Quintana, Head Military Technology & Acquisition, RUSI: [elizabethq@rusi.org](mailto:elizabethq@rusi.org).