

Directorate/Branch/Unit: Statewide Operations Directorate

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Safety & Security Committee

- Authority to Proceed
- Submission
- Information Paper

SUBJECT

- Drones (unmanned aerial vehicles)– Threats and opportunities

PURPOSE

- To provide a summary of the threats and opportunities related to Drones (unmanned aircraft) in a correctional environment.

NOTED / APPROVED / NOT APPROVED

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Kerrith McDermott

Deputy Commissioner

/ /2014

COMMENTS:

Safety & Security Committee Submission

Date: 13 June 2014

Subject: Drones – Threats and Opportunities.

Issue:

The Chief Inspector made a recommendation in March 2014 that Queensland Corrective Services (QCS) develop a strategy in response to the risks and opportunities arising from unmanned aerial vehicles and that the strategy be developed in consultation with the Safety and Security Committee. This recommendation formed part of an investigation Sch4/3/3

Sch4/3/10 were introduced to the centre by unknown means Sch4/3/10

Sch4/3/10 It is for this reason that the investigators have recommended that QCS develop and implement a strategy in response to the risks and opportunities arising from unmanned aerial vehicles.

An **unmanned aerial vehicle (UAV)**, commonly known as a **drone** is an aircraft without a human pilot on board. Its flight is controlled either autonomously by computers in the vehicle, or under the remote control of a pilot on the ground or in another vehicle.

There are a wide variety of drone shapes, sizes, configurations, and characteristics. Historically, UAVs were simple remotely piloted aircraft, but autonomous control is increasingly being employed.

They are deployed predominantly for military applications, but also used in a small but growing number of civil applications, such as policing, firefighting, and non military security work, such as surveillance of pipelines.

Domestic use of UAV's

These robot aircraft are a quickly emerging technology that is revolutionising the way we live in our modern, information-rich, society. More importantly, their potential to

provide a safe low-cost airborne delivery system or surveillance platform will have an impact on large expansive countries such as Australia.

In Australia, the use of small or recreational use drones by private persons is unregulated, as is the import of the machines. A small drone that is capable of delivering a light payload can be purchased in various retail outlets or on-line for as little as \$600.00. Any person can obtain one of these drones as there is no regulation governing ownership.

At a recent House of Representatives Standing Committee a spokesman for the Australian Certified UAV Operators Association provided advice to the committee that his association is "seeing a lot of illegal and unauthorised use of UAV's". The spokesman went on further to say "We understand that the regulator is doing its best to try and combat that but, unfortunately, they (UAV's) are so easily available and so cheap to buy these days that anybody can go out and operate one. It is really difficult to regulate, manage and catch those people. A lot of those people are coming from a non-aviation background." The former comment referring to persons operating drones for commercial purposes outside of industry standards.

Queensland Police (QPS) also provided information to the Standing Committee. They see potential for using drones for covert drug crop identification, traffic operations and natural disasters following a successful trial last year. QPS may seek to obtain aircraft, possibly second-hand ex-military drones used in Afghanistan, in time for the trans-national G20 conference in November 2014. One of these drones was the subject of an incident report from Wolston Correctional Centre earlier this year. Incident 138613 refers (attachment 1).

Criminal organizations are early adopters of technology, and some have already used UAVs and other forms of robotics to violate the law while reducing their risk of arrest and apprehension.

Drones are increasingly used for police work in Canada and the United States. They are already policing international borders, exploring deep-sea shipwrecks and repairing undersea cables. Some carry guns and bombs. Others have superhuman strength, endurance and sensory perception.

In Australia, UAV's are being trialled by law enforcement agencies to target and monitor criminal activity. Drones are also being used to inspect power poles, to identify dangerous marine life near beaches and to monitor illegal trawling in Australian territorial waters. Queensland and Victoria police and emergency services are currently trialing the use of unmanned aerial vehicles.

In 2013, the Victoria Police Air Wing hosted an international conference on the use of drones and a police spokeswoman commented that the technology is being closely watched. Victoria Police are continuing to assess the quickly maturing unmanned aerial systems (UAS) technology market for potential operational use in the future, however Civil libertarians have expressed concerns the technology could be used to spy on people.

New Zealand police are trialing an unmanned aerial drone using technology from war zones such as Afghanistan. One drone has been purchased and has been used in their investigations. NZ Police will now decide whether to continue using the technology. The drone can provide high resolution images, infrared images at night, and 3D images to help with operational planning.

Threats

A Report in Time Ideas 2013 indicates that in Latin America, the Revolutionary Armed Forces of Colombia (FARC) has been collaborating with narcocartels to create remote-controlled drug-smuggling submarines capable of transporting 1,800 kilos of cocaine more than 1,000 miles (1,600 km) without refueling. Reportedly in 2012, criminals piloted a \$600 remote-controlled quadcopter over a Brazilian prison fence to deliver mobile phones.

In 2009 a drone was used in an attempt to deliver drugs to prisoners in the United Kingdom. Four people were arrested over this attempt.

Opportunities

Drones are a "cost-effective" measure in police aerial intelligence, with an hourly operating fuel price-tag of \$30 compared to \$500 per hour for a helicopter.

Originally even basic commercial drones cost upwards of a million dollars but today they can be purchased for as little as \$50,000 and the price continues to fall with many countries continuing their withdrawal from various theatres of war we may see their high-end surplus military drones come on to the market at very low prices.

Queensland Police plan to introduce drones similar to those used by the military in Afghanistan for surveillance. Helicopters and fixed-wing aircraft are useful when it comes to search and rescue activities but come with some limitations. The advantages of drones in these environments is that some drones able to fly and hover for days and weeks on end, a single aircraft would be able to be maintained in the air for much longer while beaming back real-time video which, together with traditional aircraft, would complement most search and rescue activities.

It is anticipated that the use of drones may prove to be invaluable for a range of policing tasks, including traffic management, covert drug crop identification and even surveillance for events such as the 2014 G20 meeting and reconnaissance during outlaw biker runs.

While there are distinct possibilities for the use of drones in a domestic and policing arena it is unlikely that they would be advantageous for surveillance activities in a correctional environment given the existing surveillance routines in place at correctional facilities.

Challenges and issues - Authorized use of UAV's

The Queensland Office of the Information Commissioner has indicated that the use of drones across government is likely to increase over time. This presents a number of recordkeeping challenges that public authorities will need to address.

For example, drones are often fitted with sensory devices, such as high-resolution cameras, which are capable of generating large amounts of information in real time. Public authorities need to be aware that this information constitutes a public record. Public records must be identified, captured and retained in an accessible and useable format for as long as required to satisfy business, legislative, accountability and cultural obligations.

Another challenge posed by drones is their ability to purposely or inadvertently capture information on individuals. This may result in situations where images of people are captured without their prior knowledge or consent. If the identity of individuals is apparent or can be reasonably ascertained from such images, the drone will likely have captured personal information. Personal information may also be contained within 'descriptive' and 'technical' metadata, and user data if collected.

Recommendations:

1. That the Committee consider the information contained in this report and continue to monitor trends relating to the use of drones.
2. If approved for development the response strategy for UAV's/drones be included with existing contraband control measures rather than sit as a separate item.

Action if Approved:

3. That a strategy is developed in response to the risks and opportunities arising from unmanned aerial vehicles in a correctional environment.

Author's initials:

Date:

Name:

GM's initials:

Date:

Name:

P. Shaddock

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Peter Shaddock
General Manager
Operational Service Delivery

DATE: 13 June 2014

MEETING ACTION PLAN

The Safety & Security Committee

Thursday 26 May 2014

Level 19 Conference Room

Attendees: Samay Zhouhand, Chief Inspector (Observer)
Alan Butler, Executive Director, QCSA
Mark Morrow, Manager Electronics
Bruce Welk, Manager QCS Intelligence Group
John Forster – Executive Director, Operational Support Services

Chair: Peter Shaddock, General Manager Operational Service Delivery Statewide Operations

Minutes: Sandi Langridge, Principal Advisor, Operations

Guest: Joel Smith Deputy General Manager Brisbane Correctional Centre

Apologies: Sam Newman, Acting Executive Director, Specialist Operations
Kerrith McDermott, Acting Deputy Commissioner Statewide Operations

Item	Minutes	Action Item	Action Officer
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MEETING ACTION PLAN

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5	Drones The Committee agreed to keep a watching brief and awareness of the developing technology. The acknowledgement of the potential threats will be considered from this point as part of normal business and risk considerations as referred to within Practice Directives.	Referral to Manager Systems Assurance for procedural amendment. Advice to inform Chief Inspector recommendations regarding a Death in Custody	Sandi Langridge
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P Shaddock 4.7.14

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General Manager Operational Service Delivery Statewide Operations

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