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**Letter by email**

[justicecommittee@parliament.scot](mailto:justicecommittee@parliament.scot)

John Finnie MSP  
Convener  
Justice Sub Committee on Policing  
Room T2.60  
The Scottish Parliament  
Edinburgh  
EH99 1SP



**DEPUTY CHIEF CONSTABLE  
Malcolm Graham**

Crime and Operations  
Executive Support  
Tulliallan Castle  
Tulliallan  
Kincardine  
FK10 4BE

01259 733141

DCC.CrimeOpsOffice@scotland.pnn.police.uk

Dear Mr Finnie

**Re: Remotely Piloted Aircraft System (RPAS) Evaluation Report**

Thank you for your correspondence sent to Chief Constable Livingstone in relation to a Police Scotland Evaluation Report on Remotely Piloted Aircraft System (RPAS), commonly known as drones, in which you raise a number of concerns regarding the parameters of use and evaluations undertaken in relation to their deployment.

Given the detail sought by you, I have taken the opportunity, at the request of Chief Constable Livingstone, to lay out a detailed response to all the points you raise and also confirm the agreed next steps that Police Scotland in conjunction with the Scottish Police Authority (SPA) will undertake. These next steps will, I trust, reassure you of the immediate plans to address the issues raised by the Authority and your correspondence.

**Best Value, Privacy, Human Rights and Ethical Assessments**

I fully understand the importance of addressing the full spectrum of legitimate public interests associated with the operational use of drones. I have asked ACC Mark Williams to address some key action points to improve our communication with SPA in order to enable the fullest and most open engagement and awareness of any developments in this area, as detailed later in this letter.

As ACC Williams advised in his letter to you of 7 May 2019, as part of the RPAS project and in line with Data Protection reform in 2018, a Data Protection Impact Assessment (DPIA) was completed covering all aspects of drone use. Similarly, an Equalities and Human Rights Impact Assessment (EqHRIA) was also completed and both are reviewed annually.

You have also sought confirmation of whether Police Scotland undertook an assessment of the current drone model to establish if it is fit for purpose, demonstrates best value and whether Police Scotland should request a refund for faulty equipment. This issue was covered

in the Evaluation Report and I can confirm the current model is still fit for purpose and has undergone repair by the manufacturer to fix the water ingress issue. This problem was extensively investigated and pursued by representatives at the National Police Chiefs Council in England & Wales and they concluded that the manufacturer had satisfactorily addressed the problem. I concur with this assessment. It is worthy of note that no drone operated by Police Scotland has suffered a failure due to water ingress. On learning of the issue from operators using the same model elsewhere in the UK, Police Scotland took decisive action to mitigate the risk of an in-flight failure, by not flying in wet conditions.

Police Scotland will continue to operate the current model in line with the manufacturer's guidelines, in full compliance with aviation legislation and regulatory permissions granted by the Civil Aviation Authority (CAA).

The addition of the drones to the Police Scotland Air Support Unit (ASU) followed an extensive period of research, internally and externally, to review and consider police uses. This research work outlined the potential operational benefits and uses of drones. All ASU tasking requests are reviewed, based on a number of operational factors, to determine the most suitable air asset to deploy, whether that be the police helicopter or drone.

### **Suitability of the Model**

You further highlight that the Evaluation Report provides reference to the fault identified on the current model and consideration to newer models. PS continues to collaborate with law enforcement partners, industry and academia to promote the benefits of drone technology in operational policing and help develop drone platforms and sensors which meet the requirements of policing. PS is aware of updated models that are being tested by other police forces and will monitor this testing and consider whether any upgraded models meet the needs of PS. At this stage however, there is no immediate plan to purchase more modern drones.

### **Facial Recognition**

The camera systems on the drones do not have the capability for facial recognition. None of the platforms or sensor technology being considered are capable of facial recognition and this is not something that PS is considering changing at this time.

### **Operational Use of RPAS**

I am aware of the detail of the SPA Policing Performance Committee minute regarding the operational use of the drone technology noting wider engagement with the SPA for any other operational purposes beyond Missing Person searches.

The drones were introduced to enhance ASU delivery around Scotland to support operational policing. The letter from ACC Williams on 7 May, 2019, as well as various other written submissions, stated that drones would be used *primarily* in support of missing person investigations but would also be considered for other policing operations and incidents such as major events, public order and firearms incidents.

I am confident the actions agreed in the final section of this correspondence will allow for a constructive path forwards enabling drone use to be considered legitimately, justifiably and proportionately for potential wider relevant operational matters.

As you are aware, the drones have provided valuable assistance at incidents such as the Stonehaven train derailment, the fatal gyrocopter crash in the Black Isle, fatal traffic collisions, fatal fire investigations and crime scenes such as murder enquiries.

As outlined in the Evaluation Report, non-critical tasking such as post-investigation and crime scene imagery can be undertaken by the drones effectively and at little cost, therefore reducing the need to utilise the police helicopter for such tasks.

In relation to activity conducted by the drone based at Glasgow, Appendix 1 provides a breakdown of tasks which were summarised in the Evaluation Report.

## **Operational Safety**

Prior to deploying drones operationally, PS prepared and submitted an Operations Manual and Operating Safety Case to the aviation regulator, the CAA. This was a legal requirement. Following this submission, the CAA issued PS with the necessary permissions enabling drone operations to be conducted in both rural and urban environments day and night. PS must adhere to strict rules in terms of safety, for example never knowingly flying directly over people.

Contained within the Operations Manual and Operating Safety Case, are comprehensive risk assessments covering potential RPAS deployment scenarios. Prior to every deployment, officers will conduct a site survey and risk assessment to determine that the flight can be made safely and within the parameters of the permissions granted.

Drone operations fall under the remit of the PS ASU and as such a specific standard operating procedure is encompassed in the generic Air Support Guidance document. This is also attached for reference (Appendix 2).

You make reference to the UK Information Commissioner and specifically a data protection code of practice and whether PS carries out an assessment in terms of necessity, proportionality and the most appropriate method to address the need. As mentioned previously, a DPIA has been completed prior to drone operations commencing and this is reviewed annually. This has been provided to the SPA and is available for you to review if required.

## **Stakeholder Engagement**

In April 2019, in advance of the media launch for RPAS, PS engaged with internal and external stakeholders, which included the SPA. This engagement outlined the proposal to deploy RPAS in the North of Scotland and specifically:-

*“Police Scotland will deploy RPAS primarily in the search for missing persons, however they will also be available to support local policing incidents and pre-planned operations and events.*

*RPAS are remotely piloted aircrafts that are fitted with a multi-sensor camera system and will be deployed in both urban and rural environments.”*

In relation to Ethics Advisory Panels, I can confirm that this process was not in place in Police Scotland until October 2020 and as such was not available prior to the operational deployment of drones. It is agreed that had this engagement forum been available when drones were

introduced, it would have been a valuable undertaking and I have asked that this now be done within the new and updated structures available to us as quickly as practicable.

## Feedback from Stakeholders

Finally, I can confirm that the Police Scotland ASU Twitter account which is primarily used to inform the public of police air operations has recorded positive comments from the public when drone use is highlighted. I am unaware of any complaints or concerns being raised by the public but acknowledge that Police Scotland must do all it can to work with the SPA and consider a wider evaluation and public feedback including through our ethics advisory panels. As I have referred to above this is laid out in our 'next steps' below.

Notwithstanding the social media interactions, the ASU team receive regular correspondence from partner agencies, complimenting Police Scotland on establishing safe drone operations, and additionally seeking operational support with opportunities to utilise the technology. This also includes feedback and tasking from the Crown Office and Procurator Fiscals Service.

## Next Steps

I have spoken with the SPA, including the Convenor of the Policing Performance Committee, on a number of occasions now to agree how to proceed. These meetings have been very constructive and we will now take the following actions:

- The wider deployment of RPAS will be halted pending the actions below (this is already in place).
- The deployment of RPAS will remain restricted primarily to responding to missing persons reports and other critical deployments agreed by a senior officer (e.g. the train derailment). This discretion is to allow Police Scotland senior officers a reasonable and proportionate public interest discretion in RPAS deployment. Impact assessments will be drafted where appropriate for all these 'other deployments'.
- The Evaluation Report will be reviewed, re-drafted and resubmitted to the Policing Performance Committee to further address the issues required by the SPA (compliance with best value, privacy, human rights and ethical assessments) and any other issues that Police Scotland wishes to add.
- Police Scotland will engage with its Ethics Panels for a view on the evaluation, the use of RPAS, and any recommendations prior to the submission of the evaluation to the SPA.
- The SPA will consider wider stakeholder engagement, should the re-submitted evaluation recommend to extend significantly the deployment of RPAS.
- The evaluation should make clear RPAS deployment compliance with any surveillance camera code of conduct or similar.
- All training and deployments must remain compliant with CAA safety guidance.
- Provide further detail in relation to the non-missing persons deployments over the evaluation period and any impact assessments made and reasons for not making.

I trust this demonstrates how committed Police Scotland is to ensuring any public interest issues arising from the use of RPAS are carefully considered and addressed, with the aim of improving public confidence in our enduring commitment to keeping Scotland's communities safe and secure.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Malcolm Graham', with a horizontal line underneath the name.

Malcolm Graham  
Deputy Chief Constable

enc. Appendix 1  
Appendix 2

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**Police Scotland RPAS Operations**

**RPAS Glasgow**

**Key tasks and incidents May 2019 to April 2020**

**Missing Persons**

RPAS deployed to assist local policing divisions during high risk missing person searches. 29 flights conducted.

**Events**

RPAS deployed as part of a pre-planned local policing response to tackle local initiatives, including significant public disorder, drugs and serious and organised crime. 2 flights conducted.

**Aerial Images**

RPAS utilised to capture evidential imagery in support of crime scene and post incident investigation and subsequent criminal justice proceedings. 15 flights conducted.

**Training**

RPAS trained officers must complete 1 hour flying per month to ensure operational safety and competence. This is a legal requirement. 54 flights conducted.

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# **Air Support Unit**

## National Guidance

<b>Owning Department:</b>	Specialist Operations, OSD
<b>Version Number:</b>	1.00
<b>Date Published:</b>	16/11/2020

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## 1. Purpose

This National Guidance document provides an overview of the Police Scotland Air Support Unit (ASU) and the rules which govern police air operations. In addition this document provides general guidance on:

- Tasking of the aircraft (both spontaneous and pre-planned);
- Operational capabilities and limitations;
- Deployment to simultaneous competing incidents.

## 2. Introduction

The ASU forms part of the Police Scotland, Operational Support Division (OSD), Specialist Operations. The Unit is located at:

**Clyde Heliport, 16 Linthouse Road, Glasgow, G51 4BZ.**

The ASU operates in terms of a Police Air Operator's Certificate (PAOC) in accordance with Civil Aviation legislation. The Police Air Operations Manual (PAOM) Part 1 - [Civil Aviation Publication \(CAP\) 612](#), is a joint Civil Aviation Authority (CAA) / Home Office policy for the conduct of police air operations (as required by [Air Navigation Order 2009](#)). It is intended to ensure and legislate for a safe and effective national standard of operation in accordance with the PAOC. The PAOM further specifies certain easements allowing police aircraft to fly in a manner that other aircraft are prohibited from doing.

Police Scotland have contracted the supply of aircraft, pilots and engineering support to a commercial supplier who is the holder of a PAOC, issued by the CAA.

## 3. Aircraft Capabilities and Limitations

### Helicopter

The Air Support Unit utilises an Airbus H135 T3 light utility helicopter as the primary aircraft. This is supported by a back-up helicopter, fitted with identical police role equipment, which is utilised in the event of unscheduled or scheduled maintenance of the primary aircraft.

Both helicopters can be deployed simultaneously to provide dedicated police air support to major events or operations.

### Weather Restrictions

The decision as to whether to accept or decline a task on meteorological grounds will be taken by the pilot. Their decision is final and will not be countermanded.

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Legislation restricts the helicopter to operating with a minimum of 1 km horizontal visibility and a minimum cloud base of 300 feet by day, increasing to 5 km and 500 feet at night.

### Operational Considerations

The aircraft will generally operate with a pilot and two police air observers. [REDACTED]

Passengers may be carried under certain circumstances (i.e. rapid transport) but such persons are strictly controlled under legislation. Any person, who may compromise the safety of the aircraft, including a person in police custody, shall not be carried in the aircraft. The final decision regarding the carriage of passengers will rest with the pilot.

## 4. Aircraft Equipment

The aircraft is fitted with the following role equipment:

- **FLIR Camera:** Daylight and infra-red imaging camera linked to a digital recorder.
- **Digital Video Recorder:** Records images from the aircraft FLIR camera direct to a memory card. This also allows the crew to review footage whilst airborne.
- **Digital Downlink:** Transmits real-time images from the aircraft camera in an encrypted format which can be received at Service Overview, Helen Street, and Area control rooms situated at Bilston, Dundee, Glasgow and Motherwell. Control rooms out with this can, with prior notice, utilise one of four portable receivers which can also be set up at the scene of an event.
- **Trakkabeam:** Powerful search light which provides illumination from air to ground and can be utilised as a directional tool during operational police incidents.
- **Skyshout:** A public address system which can be used to relay messages from up to 800 feet.
- **Stretcher Fit:** The aircraft can be quickly reconfigured to carry a stretcher to assist in casualty evacuation. The stretcher is not routinely carried on the aircraft.
- **Night Vision Goggles:** The crew and pilot use night-vision goggles to assist with night operations in rural areas.
- **Digital Cameras:** The crew take still images for a variety of tasks including evidential and planning and carry Nikon D80 cameras with various lenses. A secure CD burner is also carried allowing a disc to be burned of the images whilst at the scene.
- **Tracker:** The aircraft is fitted with the Tracker stolen vehicle tracking system which is integrated within the aircraft AIMS navigation and mission system.

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- **Water Rescue Device:** The aircraft has a small rescue device which can be thrown from the aircraft by the observer towards a casualty or person in the water. The device inflates into a buoyancy aid to assist the person in the water.

### 5. Communications

The crew have the facility to monitor three Airwave talkgroups as well as the PSTRA A2G1 channel whilst at the Clyde Heliport. The landline telephone number for the crew is [REDACTED]

The aircraft call sign is SP 70. Whilst airborne, the crew will monitor PSTRA A2G1, along with two other airwave talk groups relative to the current aircraft tasking. There is also the ability to monitor Very High Frequency (VHF) channels.

Whilst on task, officers on the ground can obtain guidance from the area control room as to the appropriate channel to communicate with the aircraft.

### 6. Requesting Air Support

Officers dealing with an incident with a requirement for Air Support should, in the first instance, make a request to their own Control Room. Controllers should then adopt the following procedure:

#### Spontaneous Incidents

The aircraft is available for immediate deployment from 0800hrs until 0100 hours, seven days a week, including public holidays.

The helicopter can be requested in relation to an ongoing incident by contacting [REDACTED] Duty aircrew at the ASU directly by telephone on [REDACTED]

- Airwave talk group PSTRA A2G1;
- Duty Officer, Service Overview, via local area control room.

In the event of two equal priority incidents, where air support is requested for both, the duty crew in consultation with Duty Officer, Service Overview will decide which incident the aircraft shall attend.

#### Pre-Planned Operations / Events

To request Air Support in relation to pre-planned operations or events, the [Operational Support Tasking Process](#) should be followed. Contact should be made with the ASU for advice by telephone on the above number or by email.

Where air support is requested for similar pre-planned operations or events, occurring at the same time, the decision as to the deployment of the helicopter will be made by the Air Support Unit supervisors in consultation with Events Planning.

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### **Out of Hours Call Out**

Out with normal operating hours (0800 – 0100) the helicopter can be requested to provide air support to incidents where there is immediate threat to life or incidents of a serious nature.

In such circumstances ACRs must make a request for air support to the Duty Officer, Service Overview, who will review the incident and if appropriate, recall the duty crew.

### **Advice to Officers Requesting Air Support**

The primary purpose of the aircraft is to provide support to operational officers in the investigation of crime and the management of incidents. To that end the assistance of the ASU may be requested by any police officer.

Before attending any incident the on duty crew will apply the following test:

- 1. Is it Legal?** e.g. Are Regulation of Investigatory Powers (Scotland) Act 2000 (RIP(S) A) authorities in place, is visibility and cloud base within the parameters set by the Civil Aviation Authority (CAA)?
- 2. Is it Safe?** e.g. Can the aircraft safely enter the area, land, carry out the requested task? Weather will also be a consideration.
- 3. Is the Aircraft Likely to Enhance the Police Operation?**

It should be appreciated that due to the risks involved in flying, the cost of operating the aircraft and the experience required in judging whether the aircraft can have a positive impact on any particular incident, the final decision on whether to attend an incident will be made by the duty aircrew.

## **7. Training**

All Police Officers working within the ASU are required to complete a one-week selection course and thereafter a four-week Police Air Observers Course. Courses are based at the Clyde Heliport in Glasgow and are conducted by the Unit Executive Officer UEO (Inspector) and Training Officer, assisted by the duty crews and pilots.

A high standard of communication skills and a broad range of operational policing experience is essential. However, no formal qualifications are required to train as a Police Air Observer.

The selection week consists of basic navigational tasks and use of role equipment and is designed to assess the individual's suitability for further training and also the suitability of the individual for flying in what can sometimes be very challenging conditions.

The four week initial course covers topics including:

- Principles of flight;

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- Meteorology;
- Navigation;
- Police role equipment;
- Air observer duties and responsibilities including CAA legislation and contents of the PAOM;
- Operational procedures;
- Crew Resource Management (CRM);
- Night Vision Imaging System (NVIS) training;
- Search techniques.

During initial training there is also a requirement to complete fire-fighting training, repeated every three years, and Helicopter Underwater Escape Training (HUET).

Observers are thereafter required to complete an annual day and night assessment flight, first aid training and attend a mandatory Crew Resource Management seminar (CAA approved).

## 8. Remotely Piloted Aircraft Systems

The Air Support Unit can deploy remotely piloted aircraft systems (RPAS) to provide air support to an incident depending on the nature of the incident, the weather conditions and location. 3 operational RPAS are based at Aberdeen, Inverness and Glasgow.

RPAS are fitted with a dual sensor camera system including electro-optical and thermal image cameras. The cameras are capable of recording video footage and still images.

All police RPAS operations are strictly regulated by the CAA. Police Scotland has been granted a standard permission and operational authorisation to operate both day and night in urban and rural environments.

All tasking for air support is directed to the Air Support Unit at Glasgow. ASU officers will determine the most appropriate air asset to deploy, helicopter or RPAS, depending on the nature of the incident, weather conditions and location.

## 9. Key Contacts

Unit Executive Officer (PI)	–	[REDACTED]
Deputy Unit Executive Officer (PS)	–	[REDACTED]
Heliport Operations Room	–	[REDACTED]

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Duty Officer, Service Overview

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Version 1.00

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**Compliance Record**

<b>Equality and Human Rights Impact Assessment (EqHRIA) Date Completed / Reviewed:</b>	20/08/2020
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Publication Scheme Compliant:	No

**Version Control Table**

<b>Version</b>	<b>History of Amendments – National Guidance</b>	<b>Approval Date</b>
1.00	Initial approved version. Air Support Unit SOP fully reviewed and converted to national guidance following the Principles of the SOP Review.	16/11/2020