SI0221

Uncrewed Aircraft Systems

SI Identification Number	SI0221
Policy Ownership	Operational Support Department
Initial Publication	19 May 2021
Review Cycle	3 Years
Reviewed	5 August 2024
Last Amended	N/A
Governing Service Policy	Public Safety and Public Order
Cancellation of	N/A
Classification	**OFFICIAL [PUBLIC]**

This Service Instruction provides information on the Governance, Use and Accountability of Uncrewed Aircraft Systems within the Police Service of Northern Ireland.

we care
we listen
we act

Police Service of Northern Ireland

Corporate Policy | Service Instruction

Table of Contents

Corporate Policy | Service Instruction

Table of Appendices

1. Introduction

The Police Service of Northern Ireland (PSNI) has been using Uncrewed Aircraft Systems (UAS) since 2013, with Operational Authorisation (OA) granted to the PSNI Air Support Unit by the Civil Aviation Authority (CAA). Other PSNI users currently fly with an Operational Authorisation, such as Scientific Support Branch – Imaging Branch and Tactical Support Group.

The aim of this Service Instruction is to provide PSNI Officers and Staff, guidance in the procurement and use of UAS. This Service Instruction also seeks to introduce a safe, legal and auditable method of providing uncrewed aerial coverage, throughout Northern Ireland, for policing purposes.

The Uncrewed Aircraft System Service Instruction addresses all aspects in relation to purchase, training and competencies required of all Remote Pilots deploying UAS (in relation to Operating Authorisations provided to PSNI).

The European Convention on Human Rights (ECHR) places a positive obligation on all Public Authorities to take reasonable action, within their powers, to safeguard the rights of individuals who may be at risk, especially in regards to Article 2 (The Right to Life), European Convention of Human Rights (ECHR). The UAS Service Instruction fully addresses the responsibilities of this positive obligation and provides reference to accompanying PSNI Service Instructions involving Data and Privacy, as well as accountability.

2. Inclusions

This Service Instruction applies to trained Police Officers and Police Staff. Only authorised and trained persons may use UAS. They must be aware of and are required to comply with the procedures contained therein.

These procedures are of particular relevance to Police Officers and Police Staff within the following roles:

• Air Support Unit;

• Tactical Firearms Commanders / Officers (TFC / TFO);

• Tactical Advisors;

• Gold, Silver and Bronze Commanders;

4

- Scientific Support Branch – Imaging and Mapping;

- Operational Support Department – Tactical Support Group / Police Search Advisors (PolSA) / Dog Section; and

- Emergency & Event Planning.

Work in partnership with other emergency services and investigative agencies (e.g. Health & Safety Executive (NI), Revenue & Customs) to provide aerial imagery and appropriate incident response, increasing public safety and confidence.

3. Purpose of Uncrewed Aircraft Systems

The aim of the PSNI when deploying UAS is to:

- Provide situational awareness to Police Officers, Police Staff and Commanders in a variety of policing operations;

- Assist in searches for persons, both missing and believed at risk, or suspected of having committed offences;

- Assist with investigation at scenes of serious and fatal Road Traffic Collisions;

- Assist with investigation at major crime scenes;

- Assist with event planning, before and during events which require policing support; and

4. National Decision Model

The National Decision Model (NDM) is the primary decision-making model within the PSNI. Where applied it ensures that ethical (PSNI Code of Ethics), proportionate and defensible decisions can be made in relation to operational and non-operational policing.

5. Joint Emergency Services Interoperability Principles (JESIP)

JESIP models and principles have become the standard for interoperability in the UK.

The JESIP Joint Doctrine: the interoperability framework sets out a standard approach to multi-agency working, along with training and awareness

OFFICIAL [PUBLIC]

products for responding organisations to train their staff.

It is necessary to be aware of the following - JESIP principles, M/ETHANE as the reporting tool for situational awareness, the Joint Decision Model (JDM) and the Principles for Joint Working.

6. Tasking of Uncrewed Aircraft Systems

Any requests for air assets should be made directly to the Air Support Unit (ASU).

ASU will assess the bid and determine the most appropriate air asset (if any) for the task.

> **Note**: This will apply to pre-planned tasking only and does not affect the current process in place for live time support, via CMC etc.

A number of Tactical Support Groups (TSGs) will continue to have UAS capability to deploy spontaneously, when required.

7. Uncrewed Aircraft Systems Management – Authorised Users

The PSNI UAS Working Group will retain overall governance for the purchase, training and deployment of UAS.

Approved users must comply with the Civil Aviation Authorities (CAA) directions and provide a representative to participate on the PSNI UAS Working Group.

Any Department or District that wish to purchase and fly UAS will forward an application, with rationale, to the Chair of the UAS Working Group.

This should also include a preliminary outline activity based 'risk assessment' demonstrating compliance with the Provision and Use of Work Equipment Regulations (Northern Ireland) (PUWERNI 99) to:

- Justify the need;

- Identify how the use of this equipment could help control other existing risks; and

- Demonstrate that any new or additional risks arising from the introduction of the

6

equipment have been considered and controlled.

The Working Group will consider the report and provide a response.

> Under no circumstances must any Department or District purchase UAS, without permission of this Working Group.

Any procurement of a UAS must be compliant with the IR2030 Ofcom Regulations.

Departments and Districts must adhere to the prescriptive job roles and responsibilities (Appendix B). Failure to do so may lead to negative findings by the CAA.

8. Considerations

The operation of UAS is **strictly** limited to Remote Pilots, who have received CAA approved training and who are to fly under a current OA.

Approved training will consist of an initial ground school, followed by practical flight training, conducted by or on behalf of, a Recognised Assessment Entities (RAE).

The authorisation to deploy will only be granted after the remote pilot successfully completes all CAA mandatory exams and practical flight testing, and awarded a General VLOS Certificate (GVC). Remote Pilots should then be afforded further in-house training, which is commensurate with their role identified, through a training needs analysis specific to the activity and related risk assessment for the intended use of the equipment.

Specific hours and type of training will be determined by the designated UAS Training Manager, after consultation with the Department or District Accountable Manager.

A Remote Pilot's permission to fly on behalf of the PSNI will be at the discretion of the Accountable Manager. This permission may be withdrawn at any time by the UAS Operator / UAS Chief Pilot / UAS Training Manager, with reasons documented and supplied to the Accountable Manager at the earliest opportunity for review.

The standard flight crew consists of two Remote Pilots (RPs), one to fly the aircraft

and the other to act as a trained Assistant/Observer.

> If two Remote Pilots are unavailable and the task is not considered High Risk or Complex, the Remote Pilot In Command (RPIC) should source a Qualified Observer (QO), who;
>
> - Has been trained in accordance with the NPCC Drones Competency Framework; and
>
> - Is familiar with the UAS and the type of tasking.

For complex operations, more than one QO should be considered along with the use of other Staff to help control the relevant operating area.

There is a requirement for ongoing Continuous Professional Development (CPD), with a minimum of 12 hours of CPD per year (i.e. within a 365-day timeframe). There will be no period of CPD inactivity, greater than 6 months. Each CPD session will contain both theoretical and practical flying elements including a flight assessment. For those RPs qualified to fly at night, the assessment is to alternate between day and night flights. CPD must be facilitated by the Accountable Manager to maintain competency. Minimum flying / training must be undertaken by the Remote Pilot to maintain competency, as outlined in (Appendix C).

The PSNI have three levels of trained Pilots, Basic, Standard and Advanced. Every Remote Pilot must comply with the National Police Chiefs Council (NPCC) minimum currency standards in order to remain 'current' and deployable as a UAS Remote Pilot. To achieve advanced status the Remote Pilot must participate in further training as documented in (Appendix D).

Remote Pilots who fail to meet the current required NPCC standards will be subject to a review by the Accountable Manager / UAS Operator / UAS Chief Pilot. In all cases they will be required to attend refresher training with an UAS Training Officer in order to be reaccredited.

9. Uncrewed Aircraft Systems Equipment

The PSNI is required to protect data that is collected by a UAS. The risk in relation to

stored data on the UAS is constantly under review especially as technology advances. Therefore, any purchase of UAS equipment must first be assessed for security specification and all details passed to the chairperson of the UAS working group for review.

All UAS equipment must be compliant with Home Office and NPCC guidelines / directions.

PSNI Air Support UAS role holders can provide guidance on UAS equipment and are an important contact that should be considered at the early stages of research. Consideration must also be given to the security of data when using Mutual Support or Voluntary Organisations. Each Department or District must appoint an UAS Operator who is responsible to oversee all records that pertain to UAS equipment; deployments and compliance.

All UAS administration and management must be recorded on the relevant electronic management system. It is the responsibility of the Remote Pilot to ensure that the Flight worthiness / Equipment Manager is aware of all defects.

Any Department or District that has ownership of an UAS will be responsible for the costs of any repairs or damage to the equipment and for arranging insurance.

The UAS Accountable Manager must be kept appraised of any issue and electronic management system must be updated at the earliest opportunity.

In addition to pre-flight checks, comprehensive monthly safety checks must comply with the Operations Manual for each Department or District on each UAS and details recorded on the electronic management system.

10. Recording Data and Privacy

Any operational imagery captured by UAS onto an SD Card or other media storage must be transferred as soon as practical, (using approved equipment), onto the PSNI internal storage server. Once this transfer is completed, the recording media should be formatted for re-use. Please refer to PSNI Service Instruction, SI0518 Data Protection and SI0419 Records Management for regulations and guidance on handling and retention of data.

9

A Data Protection Impact Assessment has been completed and will be made available by the UAS Accountable Managers to Remote Pilots.

The following are instructions on the use of UAS when recording incidents.

Principles:

- Remote Pilots will deploy to specific tasking and will not indiscriminately record data.

- When attending incidents involving a search for missing persons, the Pilot must agree the requirement to record searches with the assigned Senior Investigating Officer (SIO) / PolSA.

- The Remote Pilot should be mindful that failing to record incidents that are of evidential value may require an explanation in court.

- The decision to safely deploy the UAS or not will rest with the Remote Pilot - Their decision is final.

- The deployment will be logged on the PSNI Command and Control System - Control Works.

- Any decision regarding whether or not to deploy an UAS will be recorded on Control Works.

UAS are an aerial observational medium and can be used across a wide range of policing operations. There are a number of situations where the use of UAS are not appropriate. In all cases Remote Pilots and Supervisors must use their professional judgement with regard to recording.

The following examples of where the use of UAS is not appropriate (this list is not exhaustive):

- Intimate searches - UAS must not be used under any circumstances, for video or photographic recording to be made of intimate searches. The recording of such searches may amount to a breach of, Article 3 ECHR in that it may amount to degrading treatment of a person.

- Private dwellings - Operators must consider the right to private and family life, in accordance with Article 8 ECHR (Human Rights Act 1998), and must not record beyond what is proportionate, legal and necessary to fulfil the tasking.

Provisions under the [Regulation of Investigatory Powers Act (RIPA) (2000)](#) must be taken into consideration during the operational deployment of UAS and any necessary RIPA aerial authority obtained. Consideration of [Article 6](#) ECHR (The Right to a fair trial), means that any evidence gathering techniques used by Police must be done in accordance with legislation.

Consideration towards Property Interference under [Part III Police Act 1997](#) is required, if the UAS is to be deployed from private property without consent. Advice should be sought from the PSNI Central Authorisation Bureau.

Each person has a right to a private and family life, under [Article 8](#) ECHR. Any interference with that right must be for a lawful purpose and must only be as far as is necessary and proportionate in the circumstances.

This right exists beyond private dwellings and is relevant to the ability of Police to record and store images of a person. Where a recording is of, or specifically looks at, private dwellings, [Article 8](#) ECHR will be engaged to a greater level than if Police were recording a public area. Officers must ensure the need to record an area of a private dwelling is properly justified.

[Article 1 Protocol 1](#) ECHR gives the right to peaceful enjoyment of property and possessions, which may also be engaged through police recording and / or surveillance of a person's dwelling.

Consideration to be taken, in relation to advice on the recording of children. The UN Convention on the Rights of the Child (UNCRC) details all basic rights which children are entitled to. Specifically contained within UNCRC, is a right to privacy. Any interference, as with the above, must be in accordance with a lawful purpose.

11. Accountability

Uncrewed Aircraft Systems Accountable Managers are responsible for collating all records pertaining to UAS.

Each Department or District that operates a UAS is required to apply annually to CAA for an Operational Authorisation. The process of application requires the PSNI to provide details of all Remote Pilots, training and hours flown over the previous year. It

is a legal requirement for any PSNI Remote Pilot to be included on an Operational Authorisation and registered with CAA with a Flyer ID.

All records must be maintained accurately, allowing for auditing by the CAA.

Heads of Branch or District Commanders will be responsible for the development and maintenance of 'risk assessments' for the use of the UAS within their business area and compliance with all routine and reactive maintenance arrangements.

12. Misuse of UAS

For PSNI guidance on misuse of Uncrewed Aircraft Systems (UAS) please refer to:

Unmanned Aircraft Systems | Police Service of Northern Ireland

OFFICIAL [PUBLIC]

Appendix A Glossary

Abbreviation	Term Meaning
AAIB	Air Accidents Investigation Branch
AGL	Above Ground Limit
AIP	Aeronautical Information Publication
AIS	Aeronautical Information Service
AIRPROX	Air Proximity Report
ALARP	As Low as Reasonably Practicable
AM	Accountable Manager
ANO	Air Navigation Order
AoP	Assemblies of People
AOO	Area of Operations
APP	Authorised Professional Practice
ASD	Air Safety Directive
ASMS	Air Safety Management System
ASU	Air Support Unit (PSNI)
ATC	Air Traffic Control
ATM	Air Traffic Management
ATS	Air Traffic Service

ATSP	Air Traffic Service Provider
ATZ	Aerodrome Traffic Zone
BVLOS	Beyond Visual Line of Sight
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CRM	Crew Resource Management
DPA	Data Protection Act 2018
EASA	European Aviation Safety Agency
ECCAIRS	European Co-ordination Centre for Accident and Incident Reporting Systems
ERP	Emergency Response Plan
FOD	Foreign Object Damage
FPV	First Person View
FRZ	Flight Restriction Zone
FSM	Flight Safety Manager
GNSS	Global Navigation Satellite System – collective term
GPS	Global Positioning System – sometimes used interchangeably with GNSS
HF	Human Factors
ICAO	International Civil Aviation Organisation

OFFICIAL [PUBLIC]

JESIP	Joint Emergency Services Interoperability Programme
JDM	Joint Decision Model
MOR	Mandatory Occurrence Reporting
MOU	Memorandum of Understanding
MSD	Minimum Separation Distance
MTOM	Maximum Take Off Mass
NATS	National Air Traffic Services
NDM	National Decision Model
NOTAM	Notice to Aviation
NPAS	National Police Air Service
NPCC	National Police Chiefs' Council
NSF	Non-Standard Flight
OA	Operational Authorisation
OSC	Operating Safety Case
PCM	Post-Crash Management
PDRA	Pre-Defined Risk Assessment
PPE	Personal Protective Equipment
PSNI	Police Service of Northern Ireland
QO	Qualified Observer
RAE	Recognised Assessment Entity

RP	Remote Pilot
RPIC	Remote Pilot in Command
RPZ	Runway Protection Zone
RTH	Return-to-home
SMS	Safety Management System
SOP	Standard Operating Procedure
TOLA	Take-off and Landing Area
TM	Training Manager
UA	Uncrewed Aircraft
UAS	Uncrewed Aircraft System
UP	Uninvolved Person(s)
UTM	Unified Traffic Management
VLOS	Visual Line of Sight
WGS84	World Geodetic System

Appendix B Roles and Responsibilities

Roles & Responsibilities - NB One Designated person may hold numerous job titles

Job Title	Responsibilities
UAS Accountable Manager	• Retain oversight and responsibility for all UAS operations within their Department District or Teams. • Senior Officer responsible to the CAA for maintaining safety standards in accordance with the relevant sections of the Air Navigation Order (ANO 2016), CAA Civilian Aviation Publication (CAP) 722, Air Navigation (Amendment) Order 2022 incorporating UAS Implementing Regulations (Regulation (EU) 2019/947), as well as any other relevant legislation and guidance. Must also adhere to the aircraft manufacturer's technical specifications. • Ensure all returns are provided to the UAS Working Group biannually. • Must facilitate CAA and oversight audits. Provide feedback for organisational learning.
UAS Operator	• Operations are conducted in accordance with the CAA OA, issued to the service. • That suitable records and governance are in place to certify that UAS operations can be completed safely, according to Health & Safety (H&S) requirements and within the regulatory framework. • That RP operational competency is monitored. • That a robust SMS is in place to ensure safety is prioritised and that a learning culture is promoted. • That all operations are conducted in accordance with other relevant legislation and data management obligations.

OFFICIAL [PUBLIC]

Chief Pilot	• Provide a single point of contact for all UAS safety matters.
	• Monitoring flight safety and ensuring compliance to the required law and policies.
	• Monitoring operating standards and ensuring any 'lessons identified' (LI's) are captured and disseminated.
	• Monitoring all UAS-related Mandatory Occurrence Reporting (MOR), ECCAIRS2 reporting process and identifying trends.
	• Providing flight safety advice and guidance to help reduce UAS accidents.
	• Keeping detailed records, statistics of any accidents or incidents.
	• Carrying out regular checks on records of maintenance and logs.
	• Organising the delivery of CPD, training and assessment of new and upgrading RPs, and ongoing Human Factors and currency training as required by NPCC operational guidance and this Operations Manual.
	• Keeping up to date with changes to legislation, regulation and NPCC Drones operational guidance and filtering relevant information to Staff through the most appropriate means.
UAS Training Manager / RP Instructor	• Preparing and overseeing the delivery of all relevant UAS related training. This will include ongoing CPD, annual assessments, platform/equipment familiarisation and Crew Resource Management (CRM) training.
	• Developing and maintaining training literature and digital guides as required.
	• Monitoring safety incidents, Skywise alerts and MORs to identify opportunities to improve safety through additional training.

OFFICIAL [PUBLIC]

	• Ensuring relevant training records are recorded and kept for audit and post incident purposes.
UAS Safety Manager	• Facilitate risk identification, risk analysis, and risk management. • Monitor the implementation of risk mitigation measures. • Provide periodic reports on safety performance. • Ensure that there is safety management training available and that it meets acceptable standards. • Provide all the personnel involved with advice on safety matters. • Ensure the initiation and follow-up of internal occurrence investigations. • Maintaining the Safety Management System (SMS) and UAS safety culture. • Point of contact for all UAS safety matters. • Monitor all Mandatory occurrence reporting (MORS), identifying trends and ensures correct use of ECCAIRS Reporting portal by all RPs. • Link between Safety and Health Risk Management Team and PSNI RP's. • Collate, understand and disseminate safety information from other similar organisations.
Remote Pilots	• Remote Pilots are persons who have completed and passed CAA approved training and are authorised to fly for PSNI. • Comply with the Operations Manual and operate within the Permissions and Exemptions afforded by the CAA.

| | Monitor their own pilot currency and ensure that they remain within the requirements set out in the NPCC RP Currency operational guidance. RPs who do not maintain the minimum standards are not authorised to fly. Monitor their own CPD, medical status and logbook and ensure they are kept up to date. Keep up to date with all relevant working practices and policies. The category Advanced Pilot, is granted by the Accountable Manager, upon completion of all necessary training. |

OFFICIAL [PUBLIC]

Appendix C Pilot Training / Minimum Competency

Period	Minimum Hours Flown in period	Minimum Requirement	Assessment By
Monthly	2 Flights	2 Flights	Oversight of records by Training Manager or RP Instructor.
90 Days	2 Hours	RP should have practiced: Operational flying including use of safety case. Minimum of 3 Emergency Procedures.	Oversight of records by Training Manager or RP Instructor.
Six Monthly	4 Hours	Log Book Inspection	Safety Officer UAS Chief Pilot / UAS Operator.
Six Monthly	4 Hours	1 x Night Flight (Standard / Advanced Pilot)	Oversight of records by Training Manager or RP Instructor.
Annually	12 Hours	Flight assessment by UAS Senior Pilot / UAS Operator	CPD training day(s) includes Flight assessment and written assessment. Accountable Manager to oversee assessment. UAS Operator to retain all relevant documents for CAA.

Note: There will be no period of CPD inactivity, greater than 6 months.

Appendix D Basic / Standard / Advanced Pilot

RP Level	Authorised Limits (Subject to granted OA)	Training/Currency
Basic	• Visual Line of Sight (VLOS) only – comply with Operational Authorisation (OA). • Operate within congested area – if granted in OA. • 50m horizontal separation from UP (30m Take-off). • Max Operating Height 400ft above Ground Limit (AGL). • Daytime operations only. • 50m minimum horizontal separation from assemblies of persons (comply with 1:1 rule) – if granted in OA.	• Attend and pass a General VLOS Certificate (GVC) Remote Pilot training course. Local induction training and flight assessment. • Satisfy UAS Training Manager of competence. 120 minutes within the previous 90 days and a minimum of 2 flights in the previous 30 days.
Standard	As Basic permissions but: • May have reduced horizontal separation from uninvolved persons as prescribed by the OA. • Day & night-time operations.	• A minimum of 10 flight hours in the RP's logbook and specified as Standard RP by Accountable Manager. • Attended relevant Continuous Professional Development training in relation to night-time operations and operating

OFFICIAL [PUBLIC]

		• closer to uninvolved persons. • 120 minutes within the previous 90 days and a minimum of 2 flights in the previous 30 days. • Satisfactory deployment history, at the discretion of Accountable Manager / Training Manager (AM/TM).

Advanced
 	
(Only for Districts / Departments that have an Operating Safety Case (OSC) in place and OA specifying complex permissions)
	In addition to Standard pilot permissions, Advanced pilots may fly:
	
	• Reduced horizontal separation from assemblies of people as prescribed by the OA.
	
	• Complex flights as specified in an OSC, subject to OA.
		• A minimum of 20 flight hours in the RP's logbook and specified as Advanced RP by AM, following agreement with UAS Working Group.
		
		• Attended relevant CPD training in relation to:
		
		   o Granted variations of heights / BVLOS and other complex flying.
		
		   o 120 minutes within the previous 90 days and a minimum of 2 flights in the previous 30 days.
		
		   o Satisfactory deployment history at the discretion of AM/TM.

Appendix E Legal Basis

Relevant legislation / Guidance (not exhaustive);
Air Navigation Order 2016
Air Navigation Order (Amendment) Act 2022
The Data Protection Act (2018)
The Data Protection (Processing of Sensitive Personal Data) Order (2000)
The Computer Misuse Act (1990)
The Health and Safety at Work Order (NI) (1978)
Provision and Use of Work Equipment Regulations (Northern Ireland) 1999
Human Rights Act (1998) Article 8 (right to Privacy)
Regulation of Investigatory Powers Act (RIPA) (2000)
Freedom of Information Act (2000)
Health & Social Care Act (Reform) Act (NI) 2009
CCTV National Code of Practice – Information Commissioner's Office
Police (Northern Ireland) Act 2000
The Criminal Procedure and Investigations Order (NI) (1997)
The Protection of Freedoms Act 2012 (Relevant Official Records) Order (NI) 2018

Appendix F Contact Us

Service Instruction Author

Operational Support Department

Branch Email

OTDU@psni.police.uk