



FREEDOM OF INFORMATION REQUEST



Request Number: F-2014-03788

Keyword: Human Resources

Subject: UAVs / Drones Usage

Request and Answer:

I am writing to confirm that the Police Service of Northern Ireland has now completed its search for the information.

I have today decided to:

- disclose information in response to question 2 in full; and
- disclose information in response to questions 1 subject to the deletion of information pursuant to the provisions of Sections 24, 40 and 31 of the Freedom of Information 2000 (the Act).

Question 1

All copies of internal policy/guidance on the use of UAVs/drones the authority has and holds a licence for with the Civil Aviation Authority. This should include, but not be limited to, when the drones should/May be used, guidelines for operation, privacy impacts, and any more information held about their operation/potential operation.

Answer

Please see the attached document, Emergency Service Small Unmanned Aircraft Operations Manual (ESSUAOM) Part 1. Part 2 of the document has been exempted by virtue of the exemptions listed below. PSNI considered releasing a redacted version of this document but in excess of 80% of the document would have been redacted and the remainder would not have made any sense to the reader.

Section 17(1) of the Freedom of Information Act 2000 requires the Police Service of Northern Ireland, when refusing to provide such information (because the information is exempt) to provide you the applicant with a notice which:

- (a) states that fact,
- (b) specifies the exemption in question and
- (c) states (if not otherwise apparent) why the exemption applies.

The exemption/s, as well as the factors the Department considered when deciding where the public interest lies, are listed below:

Section 40 (2)(a)(b) by virtue of Section 40(3)(a)(i) – Personal Information
Section 24 (1) – National Security
Section 31 (1)(a)(b) – Law Enforcement

Section 40, Personal Information, is an absolute exemption which means there is no requirement on the Public Authority to consider whether there is a public interest in disclosure. This is so because personal data is governed by other law (The Data Protection Act 1998). A disclosure under the Freedom of Information Act is a release of information to the world in general and not just to the individual applicant.

The information redacted by PSNI relates to third parties who we consider could be identified from that information. This information identifying them constitutes their 'personal data'. We have therefore considered whether the disclosure of this personal data is subject to the exemption at section 40(2) of the Freedom of Information Act 2000 (by virtue of s40 (3)(a)(i)). If the disclosure of the personal data would contravene any of the eight data protection principles contained within the Data Protection Act 1998, the exemption at section 40(2) of the Freedom of Information Act 2000 will apply. Section 40(2) of the Freedom of Information Act 2000 by virtue of section 40(3)(a)(i) states:-

“(2) Any information to which a request for information relates is also exempt information if

- a) it constitutes personal data which do not fall within subsection (1), and
- b) either the first or the second condition below is satisfied.

(3) The first condition is –

- a) in a case where the information falls within any of paragraphs (a) to (d) of the definition of “data” in section 1(1) of the Data Protection Act 1998, that the disclosure of the information to a member of the public otherwise than under this Act would contravene – i. any of the data protection principles ...”

The eight principles within the Data Protection Act, are principles of good information handling standards which PSNI must comply with in relation to how it handles personal information, including deciding whether to disclose it or not. In particular, the first principle requires personal data to be processed 'fairly and lawfully'. In considering whether it is 'fair' to individuals to release this information about them, PSNI considered the likely expectations of those individuals. It is unlikely that it would be within the expectations of these individuals that their identification information would be put into the public domain as they do not hold positions of senior rank. Therefore disclosure would be in contravention of the first Data Protection Principle as it would be 'unfair' to those individuals to release it and PSNI has removed that information.

Sections 24 and 31 are prejudice-based, qualified exemptions. This means the legislators have agreed there would be harm if this information was released and a Public Interest Test and Harm Test must be carried out.

Harm Test

Section 24

Part 2 of ESSUAOM identifying the manufacturer and system types and would allow terrorists and criminals to identify the capabilities of the UAS available for use by the PSNI thus adversely affecting the ability of the PSNI to protect National Security. The document contains details of the endurance and range of the systems purchased and thus releasing this information would allow terrorist groupings to identify and exploit potential areas and times of limited coverage. To identify any limits in the capabilities of these aircraft could aid terrorists in avoiding detection and also hinder the prevention of crime which could lead to an increase in terrorist activity and put lives at risk.

Section 31

The release of information in respect of the make, type and limitations of the UAS would reveal the capabilities of these resources and give important information to criminals. The release of this

detailed information would allow criminals to identify the strengths and weakness of the aircraft and they would be able to use information in planning criminal acts. This would therefore both directly and indirectly impact on the prevention and detection of crime, the apprehension of criminals by the PSNI and increase the fear of crime in the community the PSNI seeks to serve.

Public Interest Test

Factors favouring release - Section 24

Release of this information would reassure the public that the PSNI is actively seeking to protect the public and fulfil its National Security obligations. It would also lead to a better informed public and public debate.

Factors favouring retention – Section 24

The threat to National Security in Northern Ireland is designated as severe as evidenced by recent booby trap bombs and car incendiary devices. To release detailed information on the type and capabilities of the UAVs, including their range and endurance, available to the PSNI would give important information to terrorists and criminals.

Access to this information could be used by individuals or groups, who are intent on criminal activity, to identify and exploit the limitations of these resources, thus hindering the prevention and detection of crime and increasing the risk to public safety. Terrorists could target areas of weakness knowing that their activities are less likely to be detected.

Factors favouring release - Section 31

In times of public expenditure cuts the public have also an interest in knowing how public money is being spent in ensuring value for money both at the point of purchase and also in respect of what those resources are to be used for.

There is also a strong public interest in how the PSNI engages with its Law Enforcement role and release of this information would better inform the public how the resources PSNI have invested in help to fulfil this responsibility.

Factors favouring retention - Section 31

Disclosure of the document would mean that individuals would know the capabilities and limitations of the UAVs. To disclose the strengths and any possible weaknesses of the equipment would compromise law enforcement tactics which could lead to more crime being committed and individuals being placed at risk. It may also be used by criminals/terrorists in combination with other information they have gathered to try and prejudice law enforcement.

Decision

While there is a strong public interest in how public money is being spent and how the PSNI is dealing with the threat to National Security as well as how it engages with its Law Enforcement role the PSNI has a duty to deliver effective law enforcement and national security. Criminal elements could use this information to evade police, therefore directly undermining their law enforcement role.

The threat of a terrorist attack is assessed as severe in Northern Ireland and the release of operational data on police resources into the public domain has the potential to assist criminal elements to launch attacks. The PSNI will not divulge any information which could hinder the prevention and detection of crime and also adversely impact on the apprehension and prosecution of offenders.

The Service has a duty to protect the community it serves and needs to use exemptions appropriately to protect information if the release of that information would have an adverse impact on the community.

Although there is public interest in knowing how this equipment is being used there is a greater public

interest in ensuring that criminal activities and terrorism are both detected and prevented so ensuring the safety and well-being of the public. I am therefore satisfied that in respect of this request the public interest lies in not disclosing the information requested and that the PSNI is using exemptions appropriately to protect the information it holds.

Question 2

Also, please provide me with the number of UAVs the authority had and number of staff who are trained to operate them.

Answer

The PSNI has a total of 9 Unmanned Aerial Vehicles and 12 members of staff are trained to operate these vehicles.

Partial NCND

In addition, the PSNI neither confirms nor denies that it holds any other information relevant to the covert use of UAV's by virtue of the following exemptions:

Section 23(5) - Information supplied by, or concerning, certain security bodies

Section 24(2) - National Security

Section 31(3) - Law Enforcement

Section 23 is an absolute class-based exemption and there is no requirement to conduct a harm or public interest test.

Sections 24, and 31 are prejudice based qualified exemptions and there is a requirement to articulate the harm that would be caused in confirming or denying that any other information is held as well as carrying out a public interest test.

Harm for the partial NCND

As you may be aware, disclosure under FOIA is a release to the public at large. Whilst not questioning the motives of the applicant, confirming or denying that any other information regarding the covert use of this equipment is held would show criminals what the capacity, tactical abilities and capabilities of the Service are, allowing them to target specific areas of the UK to conduct their criminal/terrorist activities. Confirming or denying the specific circumstances in which the police service may or may not deploy UAV's covertly, would lead to an increase of harm to covert investigations and compromise law enforcement. This would be to the detriment of providing an efficient policing service and a failure in providing a duty of care to all members of the public.

The threat from terrorism cannot be ignored which is evidenced by recent incendiary attacks and thwarted bomb attacks in Northern Ireland, where the threat level is set at the second highest level of 'severe'. Since 2006, the UK Government have published the threat level, based upon current intelligence and it has recently raised the threat level in the rest of the UK to 'severe' reflecting the present increasingly complex and unpredictable international security landscape.

It is well established that police forces use covert tactics and surveillance to gain intelligence in order to counteract criminal behaviour. It has been previously documented in the media that many terrorist incidents have been thwarted due to intelligence gained by these means.

Confirming or denying that any other information is held in relation to the covert use of UAV's would limit operational capabilities as criminals/terrorists would gain a greater understanding of the police's methods and techniques, enabling them to take steps to counter them. It may also suggest the limitations of police capabilities in this area, which may further encourage criminal/terrorist activity by exposing potential vulnerabilities. This detrimental effect is increased if the request is made to several different law enforcement bodies. In addition to the local criminal fraternity now being better informed, those intent on organised crime throughout the UK will be able to 'map' where the use of certain tactics are or are not deployed. This can be useful information to those committing crimes.

This would have the likelihood of identifying location-specific operations which would ultimately compromise police tactics, operations and future prosecutions as criminals could counteract the measures used against them.

Any information identifying the focus of policing activity could be used to the advantage of terrorists or criminal organisations. Information that undermines the operational integrity of these activities will adversely affect public safety and have a negative impact on both national security and law enforcement.

Section 24

Factors favouring confirming or denying

The information if held simply relates to national security and confirming or denying whether it is held would not actually harm it. The public are entitled to know what public funds are spent on and what security measures are in place, and by confirming or denying whether any other information regarding UAV's is held would lead to a better-informed public.

Factors against confirming or denying

By confirming or denying whether any other information is held in respect of the possible covert use of UAVs would render Security measures less effective. This would lead to the compromise of ongoing or future operations to protect the security or infra-structure of the UK and increase the risk of harm to the public in Northern Ireland.

Section 31

Factors favouring confirming or denying

Confirming or denying whether any other information is held in respect of any covert use of this resource would provide an insight into the police service. This would enable the public to have a better understanding of the effectiveness of the police and about how the police gather intelligence. Confirming or denying would greatly assist in the quality and accuracy of public debate, which could otherwise be steeped in rumour and speculation. Where public funds are being spent, there is a public interest in accountability and justifying the use of public money.

Some information is already in the public domain regarding the police use of this type of specialist equipment and confirming or denying whether any other information is held would ensure transparency and accountability and enable the public to see what tactics are deployed by the Police Service to detect crime.

Factors against confirming or denying

Confirming or denying that any other information is held regarding the covert use of UAV's, would have the effect of compromising law enforcement tactics and would also hinder any future investigations. In addition, confirming or denying methods used to gather intelligence for an investigation would prejudice that investigation and any possible future proceedings.

It has been recorded that FOIA releases are monitored by criminals and terrorists and so to confirm or deny any other information is held concerning specialist tactics or covert use would lead to law enforcement being undermined. The Police Service is reliant upon all manner of techniques during operations and the public release of any *modus operandi* employed, if held, would prejudice their ability to conduct similar investigations.

By confirming or denying whether any other information is held in relation to UAV's would hinder the prevention or detection of crime. The Police Service would not wish to reveal what tactics may or may not have been used to gain intelligence as this would clearly undermine the law enforcement and investigative process. This would impact on police resources and more crime and terrorist incidents would be committed, placing individuals at risk. It can be argued that there are significant risks associated with providing information, if held, in relation to any aspect of investigations or of any nation's security arrangements so confirming or denying that any other information is held, may reveal the relative vulnerability of what we may be trying to protect.

Balance Test

The security of the country is of paramount importance and the Police service will not divulge whether any other information is or is not held if to do so would place the safety of an individual at risk, undermine National Security or compromise law enforcement. Whilst there is a public interest in the transparency of policing operations and providing assurance that the police service is appropriately and effectively engaging with the threat posed by various groups or individuals, there is a very strong public interest in safeguarding the integrity of police investigations and operations in the highly sensitive areas such as extremism, crime prevention, public disorder and terrorism prevention. As much as there is public interest in knowing that policing activity is appropriate and balanced this will only be overridden in exceptional circumstances. The areas of police interest is a sensitive issue that reveals local intelligence therefore it is our opinion that for these issues the balancing test for confirming or denying whether any other information is held regarding the covert use of UAV's, is not made out.

However, this should not be taken as necessarily indicating that any information that would meet your request exists or does not exist.

If you have any queries regarding your request or the decision please do not hesitate to contact me on 028 9070 0164. When contacting the Freedom of Information Team, please quote the reference number listed at the beginning of this letter.

If you are dissatisfied in any way with the handling of your request, you have the right to request a review. You should do this as soon as possible, or in any case within two months of the date of issue of this letter. In the event that you require a review to be undertaken, you can do so by writing to the Head of Freedom of Information, PSNI Headquarters, 65 Knock Road, Belfast, BT5 6LE or by emailing foi@psni.pnn.police.uk.

If following an internal review, carried out by an independent decision maker, you were to remain dissatisfied in any way with the handling of the request you may make a complaint, under Section 50 of the Freedom of Information Act, to the Information Commissioner's Office and ask that they investigate whether the PSNI has complied with the terms of the Freedom of Information Act. You can write to the Information Commissioner at Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. In most circumstances the Information Commissioner will not investigate a complaint unless an internal review procedure has been carried out, however the Commissioner has the option to investigate the matter at his discretion.

Please be advised that PSNI replies under Freedom of Information may be released into the public domain via our website @ www.psni.police.uk

Personal details in respect of your request have, where applicable, been removed to protect confidentiality.

Emergency Services Small Unmanned Aircraft Operations Manual

Part 1

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Foreword

1 Status

- 1.1 This document applies to the Emergency Services operation of Small Unmanned Aircraft (SUA).
- 1.2 The Emergency Services SUA Operations Manual Part 1 (ESUAOM Part 1) sets out the policy for the conduct of police and emergency services SUA operations. It is intended to ensure a safe and effective national standard of operation in accordance with the issuance of a SUA Permission. It is a CAA approved publication and can only be amended by CAA action. These rules represent the minimum acceptable standard, but individual circumstances may require Permission holders to apply higher minima.
- 1.3 Applicants for a SUA Permission are required to produce a Emergency Services SUA Operations Manual Part 2 (ESUAOM Part 2) that embraces information particular to that operator, to a standard that is acceptable to the CAA.
- 1.4 The practices, procedures and limitations set out in the two parts of the ESUAOM, taken together, lay down the minimum standards that shall be considered mandatory on all operating staff, except where the text is clearly advisory, permissive or purely informative.
- 1.5 The ESUAOM Parts 1 and 2 contain the information that will be necessary to enable the SUA Permission holder's staff to perform their duties safely.

2 Amendment Policy

- 2.1 A SUA Permission holder may forward proposals for change to the ESUAOM Part 1 via the assigned Flight Standards Officer (FSO). The CAA will consult with the appropriate operators and authorities before issuing any amendment.
- 2.2 A SUA Permission holder may initiate amendments to the ESUAOM Part 2. A copy of each such amendment shall be forwarded to the assigned FOI, either before or immediately after it comes into effect, for consideration, acceptance and incorporation into the CAA copy of the manual.

3 Gender

- 3.1 References to the masculine gender used for convenience in this document apply equally to the feminine gender, where appropriate.

Chapter 1 Introduction

1 Terminology (See also CAP 722)

- 1.1 'Small Unmanned Aircraft' means any unmanned aircraft, other than a balloon or a kite, having a mass of not more than 20kg without its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight.

Note: For electrically powered SUA, the battery(s) is included in the mass of the aircraft and is not considered as 'fuel'.

- 1.2 'Remotely-piloted aircraft' (RPA) means an unmanned aircraft which is piloted from a remote pilot station.
- 1.3 'Remote Pilot' (RP) means the person charged by the operator with duties essential to the operation of a remotely-piloted aircraft and who manipulates the flight controls, as appropriate, during flight time. The RP will be the Person in Charge of the SUA for the purposes of Articles 166 and 167 of the Air Navigation Order (ANO).
- 1.4 'Remote Pilot Station' (RPS) means the component of the RPA system containing the equipment used to pilot the RPA and any other facility associated with the flight or the purpose of the flight.
- 1.5 'Remote Pilot Station Mission Operator' (RPSMO) means a trained and competent person designated by the SUA Permission holder who assists the remote pilot with the safe conduct of the flight and the operation of any mission equipment associated with the purpose of the flight.
- 1.6 'RPA Observer' (RPAO) means a trained and competent person designated by the SUA Permission holder who, by visual observation of the SUA, assists the remote pilot in the safe conduct of the flight.
- 1.7 'Congested area' in relation to a city, town or settlement, means any area which is substantially used for residential, industrial, commercial or recreational purposes.

2 Operating Regulations

- 2.1 The regulations that apply to SUA are dependant upon the mass of the SUA (either 7 kg or less, or more than 7 to 20 kg). CAA Permission is required to operate all SUA for aerial work purposes or when conducting surveillance or data gathering within prescribed conditions.
- 2.2 The RP shall be responsible for controlling the flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions.
- 2.3 In the event that a manned aircraft appears to be on a converging heading towards the SUA, the RP must ensure separation is maintained and if necessary shall land the SUA in a safe and expeditious manner. Due to an SUA's small size, its colour scheme and its relative speed, it is less likely that the pilot of a manned aircraft would be able to see it in time to avoid it safely.
- 2.4 The main ANO regulations that apply to 20kg or less unmanned aircraft are:

138 *Endangering safety of any person or property*

A person must not recklessly or negligently cause or permit an aircraft to endanger any person or property.

166 *Small unmanned aircraft*

- (1) *A person must not cause or permit any article or animal (whether or not attached to a parachute) to be dropped from a small unmanned aircraft so as to endanger persons or property.*
- (2) *The person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made.*
- (3) *The person in charge of a small unmanned aircraft must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions.*
- (4) *The person in charge of a small unmanned aircraft which has a mass of more than 7kg excluding its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight, must not fly the aircraft:*
 - (a) *in Class A, C, D or E airspace unless the permission of the appropriate air traffic control unit has been obtained;*
 - (b) *within an aerodrome traffic zone during the notified hours of watch of the air traffic control unit (if any) at that aerodrome unless the permission of any such air traffic control unit has been obtained; or*
 - (c) *at a height of more than 400 feet above the surface unless it is flying in airspace described in sub-paragraph (a) or (b) and in accordance with the requirements for that airspace.*
- (5) *The person in charge of a small unmanned aircraft must not fly the aircraft for the purposes of aerial work except in accordance with a permission granted by the CAA.*

167 *Small unmanned surveillance aircraft*

- (1) *The person in charge of a small unmanned surveillance aircraft must not fly the aircraft in any of the circumstances described in paragraph (2) except in accordance with a permission issued by the CAA.*
- (2) *The circumstances referred to in paragraph (1) are:*
 - (a) *over or within 150 metres of any congested area;*
 - (b) *over or within 150 metres of an organised open-air assembly of more than 1,000 persons;*
 - (c) *within 50 metres of any vessel, vehicle or structure which is not under the control of the person in charge of the aircraft; or*
 - (d) *subject to paragraphs (3) and (4), within 50 metres of any person.*
- (3) *Subject to paragraph (4), during take-off or landing, a small unmanned surveillance aircraft must not be flown within 30 metres of any person.*
- (4) *Paragraphs (2)(d) and (3) do not apply to the person in charge of the small unmanned surveillance aircraft or a person under the control of the person in charge of the aircraft.*

(5) *In this article 'a small unmanned surveillance aircraft' means a small unmanned aircraft which is equipped to undertake any form of surveillance or data acquisition.*

2.5 Guidance material for the operation of SUA may be found in the following documents:

CAP 722 – Unmanned Aircraft Operations in UK Airspace

CAP 658 – Model Aircraft – A Guide to Safe Flying

Chapter 2 Operating Requirements

1 Performance Requirements

1.1 Endurance

A method shall be established to determine the elapsed flight time and the estimated time remaining. Flight shall be planned so as to allow the SUA to reach its intended landing area with sufficient flying time available to execute a go-around and landing.

1.2 Failsafe mechanism

The SUA must be equipped with a mechanism that will cause the aircraft to land in the event of disruption to or failure of any of its control systems including the control data link.

2. The Crew

2.1 Selection

The ESUAOM Part 2 shall contain specific criteria for the selection of SUA Crew, taking relevant previous experience into account.

2.2 Qualification and Experience

a. The minimum level of qualification for a RP shall be:

1. Satisfactory completion of the manufacturers training course;
2. Satisfactory completion of the BNUC-s, or CAA accepted equivalent; and
3. Satisfactory completion of the "in house" training.

b. The minimum level of qualification for a RPSMO and RPAO shall be satisfactory completion of the "in house" training.

2.3 Recency

Each RP is required to complete an annual competency check. The results of these checks shall be recorded for each RP.

2.4 Training

Operator "in house" training is to be described and scheduled in the ESUAOM Part 2.

3. Unmanned Aircraft Operating Minima

3.1 The ESUAOM Part 2 shall contain specific weather operating minima for the SUA.

3.2 The cloud and visibility must be sufficient so as to allow the RP to maintain direct, unaided visual contact with the aircraft at all times.

- 3.3 Other significant weather conditions must be considered such as the proximity of thunderstorms and rain.
- 3.4 Establishment of the minimum separation distances to persons, vessels, vehicles and structures under the control of the RP.

4 Additional Requirements

4.1 Operating Site Survey Assessment

Prior to each flight, a site survey assessment must have been completed by the RP taking into account the suitability of the proposed area to conduct the flight safely. Factors that should be considered (but not limited to) are:

- a. Hazards – physical hazards such as wires, trees, masts, etc.
- b. Proximity to persons, vessels, vehicles and structures not under the control of the RP
- c. Local byelaws restricting the use of “recreational” aircraft from parks etc.
- d. Use of Aviation Charts to establish proximity of known airfields and helipads.
- e. Use of Aviation Charts to determine if proposed flight is within controlled airspace or Aerodrome Traffic Zones (ATZ).
- f. For flights within controlled airspace or ATZs contact with ATC unit is established.
- g. Notification / Communications established with Police ASU, HEMS, Fire Brigade, Coastguard, Military and other survey aircraft as appropriate.
- h. Designation of an area for take-off and landing with an alternative landing site for contingency use.
- i. Weather assessment including consideration of wind effects close to structures / trees, proximity of other significant weather (thunderstorms / rain etc).
- j. Landowner permission on whose land the SUA is intended to take-off and land has been obtained, if appropriate.

5 Flight Logs

- 5.1 Logs of all flights undertaken by the SUA are to be kept for a minimum of two years after the date of the flight that the entry refers to. The logs are to record the location, the time of the flight and duration, and the RP / RPSMO details.
- 5.2 Each RP is required to keep records of the details of any flights undertaken in a Flight Log.

Chapter 3 Operating Procedures

1 Failsafe Checks

- 1.1 Prior to each flight the RP must be satisfied that the failsafe mechanism is in working order before the aircraft commences its flight.

2 Attachment of Payloads

- 2.1 The RP must be satisfied that any load carried by the aircraft is properly secured.

3 Control Link

- 3.1 The maximum range of the control link shall be established by the manufacturer, and the policy for the maximum operating range of the SUA from the RP shall be determined with an adequate safety margin.
- 3.2 A ground range check at 50 metres to check for correct functioning of the controls with no “jittering” is recommended at regular intervals, and at least every two months.

4 Pilot distraction

- 4.1 The RP must not be distracted from the task of safely flying the SUA. The RPSMO should normally be the only person to communicate directly with the RP. If RPAOs are utilised for an operation, they should also be able to communicate directly with the RP.
- 4.2 Distraction may also occur if “flying through the sun” causes temporary blindness. RPs and RPAOs should be aware of the sun’s position in relation to themselves and the aircraft. The use of sunglasses is recommended.

5 Communications

- 5.1 For operations within controlled airspace or ATZs, the RP must monitor the appropriate ATC VHF frequency or establish a method of contact with the ATC unit.
- 5.2 Where appropriate, the RP should monitor the SAR Scene of Search VHF frequency 123.1MHz.
- 5.3 In all cases, the RP must have the ability to communicate with emergency services aircraft.

6 Emergency Procedures

- 6.1 Loss of Control Link – actions in the event of a loss of control link must be laid down in the ESUAOM Part 2.
- 6.2 Malfunctions – at any sign of malfunction or an unexpected loss of aircraft parts, land as soon as it is safe to do so.

- 6.3 Designated landing area not clear – never assume the landing area is clear. Always look and be prepared to land in a safe place away from the planned landing area if necessary. In all cases the safety of third parties is paramount.
- 6.4 Aircraft Deconfliction – actions in the event of converging aircraft. The responsibility to avoid aerial collisions rests with the RP. Therefore, if another aircraft is seen to be on a converging heading the RP must take action to avoid the collision and, if there is any doubt, land the aircraft.

Chapter 4 Operations Manual Part 2

1 Operations Manual Part 2

1.1 An SUA Permission holder must ensure that the ESUAOM Part 2 includes procedures specifying operational considerations specific to his SUA operations. Relevant extracts from the ESUAOM Part 2 should be made available to the organisation requesting the services of the SUA.

1.2 The ESUAOM Part 2 should cover:

Section 1 – Administration

- a. Basic Concepts
- b. Structure of the SUA management organisation
- c. Appointments and Responsibilities
- d. Selection of RPs, RPAOs and RPSMOs
- e. Use of contracted pilots, mission operators and observers
- f. Occurrence Reporting – CAP 722 Guidance
- g. Consumption of Alcohol, Medicines and Drugs, and Smoking
- h. Medical – requirements for RPs, RPSMOs and RPAOs (eyesight, etc DVLA Standard)
- i. List of all RPs and their qualifications
- j. List of all RPSMO and RPAOs and their competency assessments
- k. Records and logs

Section 2 - Flight Planning

- a. Air Traffic Services
- b. Task assessment and site survey procedures
- c. RP, RPAO and RPSMO responsibilities
- d. Pre-Flight Briefing to include a NOTAM checking and meteorological information gathering.
- e. Area of Operation – graphical representation on an Aviation Chart
- f. SUA Payload - Loading and Attachment
- g. Communications Procedures – ASU, HEMS, Coastguard, Military and other survey aircraft (use of PINS / CANP as appropriate)
- h. Night Flying – list the items of equipment required for night flying.
- i. Flight Time and Duty Limitations

Section 3 – Flight Operations

- a. This section must cover the particular operating requirements, limitations and procedures of the SUA(s) being operated and can be referenced to the manufacturers' operating handbooks.

- b. The following are examples of the procedures to be covered:
 - i. On site survey
 - ii. Pre-flight checks
 - iii. Start
 - iv. Take-off
 - v. In flight
 - vi. Landing
 - vii. Shutdown
 - viii. Emergencies

Section 4 – Emergency Services SUA Operating Approvals

- a. Copy of current CAA Permission
- b. Variations to the agreed SUA operation with supporting documentation.

Chapter 5 Maintenance

1 Maintenance

- 1.1 The manufacturers maintenance schedule must be followed.
- 1.2 Prior to each flight the RP must visually inspect the aircraft to reasonably satisfy himself that the aircraft is airworthy.
- 1.3 The RP should be aware of when the next maintenance is due either by hours flown or date to ensure the SUA is not flown when maintenance is overdue.