

Operations Manual Renewal Guidance

Version 6.6

18th January 2024



Introduction

This document has been produced to summarise changes to UAS regulations in the United Kingdom to enable Accountable Managers and/ or Remote Pilots to understand and implement relevant changes to the Unmanned Aircraft Systems Operating Safety Case and specifically Volume 1 – Operations Manual. Applicants can apply for their renewal up to 90 days prior to the expiry date detailed on their Operational Authorisation.

The Operations Manual should be accompanied by all Remote Pilot's (RP) Logbooks (showing at least 2 hours flight time in 90 days) and all certificates of competency. The cost of renewal is dependent on the mass of the aircraft and can be found within <u>ORS5 No. 404</u> with information specific to UAS found at Paragraph 3.9.

This document does not absolve any personnel from their responsibility to read and understand any regulation, guidance or policy published by the Civil Aviation Authority (CAA) and is designed to assist in the interpretation and implementation of necessary changes to the Operations Manual. Heliguy™ accepts no liability for any charges incurred for applications placed on hold, rejected or any fees incurred by the aforementioned from information contained herein.

Advice & Guidance

The regulations applicable to the operation of Unmanned Aircraft Systems (UAS) in the Specific Category has undergone significant development, and therefore it is the responsibility of the Accountable Manager of the UAS Operator to monitor such doctrine for applicable updates. The Operations Manual should be updated accordingly, and the information disseminated to all employees involved in the operation of UAS.

The CAA developed the SkyWise website to assist personnel involved in the operation of UAS in receiving notifications of policy updates. It is therefore advisable for all personnel to sign-up to the system.

Amendment Policy

When an amendment to the Operations Manual is required, the Accountable Manager should amend the document where required and conduct the following action:

- 1. Update the version number of the document (eq. V2.1 to 2.2)
- 2. Create a new row in the amendment record and summarise the changes
- 3. Ensure the cover page matches the amendment record
- 4. Publish the document and disseminate the document accordingly
- 5. Consider conducting a training session with all personnel to discuss the changes

Minor amendments which do not change the Operational Authorisation do not need to be submitted to the CAA for approval and will be validated during the applicants next renewal review. Additional UAS can be added, provided they fall within the 'UAS type' permitted by the Operational Authorisation.



Summary of Changes

Amendment Record

The amendment record should detail the version history of the document in line with the updated publications, additions/ removal of UAS and any other changes to the document. The amendment record should detail the Version number, the date it was changed and the digital signature of the Accountable Manager authorising the change.

Version	Date	Amendment	Author	Signature
v1.0	25/3/2022	Initial Release	EX	Example
v1.1	13/4/2020	Receipt and inclusion of OA	EX	Example
v1.2	05/11/2020	Updated CAP 722	EX	Example
V1.3	27/11/2020	Addition of DJI Mavic 2 Pro	EX	Example

Reference Documents

The addition of a Reference document library is a mandatory requirement and should be updated to ensure the latest versions of the Civil Aviation Publications (CAP) and any other referenced documents. It is recommended to visit the CAA Website for the latest version of any CAP and the UAS manufacturer's website for the latest aircraft user manual. A list of the most up to date CAP documents is provided below for reference (correct at time of publish).

Document	Title	Version/ Date	Link
ANO 2016/765	The Air Navigation Order 2016 (as amended)	13/04/2022	ANO 2016/765
SI No. 2020/1555	The Air Navigation (Amendment) Order 2020	V1 17/12/2020	<u>CAP 2013</u>
Assimilated Regulation (EU) 2019/947	Commission Implementing Regulation (EU) 2019/947	12/2022	<u>2019-947</u>
CAP1789A	The UAS Implementing Regulation; UK consolidated text	V7.0 02/12/2022	<u>CAP1789A</u>
ORS9 - CAA Decision No. 16	Acceptable Means of Compliance / Guidance Material	V1.0 07/12/2022	AMC/GM
CAP722	Unmanned Aircraft System Operations in UK Airspace – Guidance	V9.1 22/12/2022	<u>CAP 722</u>
CAP 722C	UAS Airspace Restrictions Guidance and Policy	V2.0 07/12/2022	<u>CAP 722C</u>
CAP 722H	Specific Category Operations: Pre-defined Risk Assessment Requirements, Guidance & Policy	V2.0 04/08/2023	<u>CAP 722H</u>
CAA Website	UK Mandatory Occurrence Reporting	N/A	CAA Website
UK Regulation (EU)785/2004	Regulation (EC) No 785/2004 of the European Parliament and of the Council of 21 April 2004 on insurance requirements for air carriers and aircraft operators	V1 30/4/2004	UK Regulation (EU)785/2004
RTSA 2003	Railway and transport safety act 2003 - Chapter 20 Part 5 – Aviation; Alcohol and Drugs	V1 10/07/2003	RTSA 2003
DPA 18	Data Protection Act 2018	V1 2018	<u>DPA 18</u>

2024 Amendments

The Following changes should be made on the Reference Documents Table. Details can be found on page 3 of this document. Also, amendments to the Safety Statement should be made to reflect this change in your Operations Manual.

When we left the EU, EU law that became UK law was referred to as retained EU law.

The CAA established a standard way for referring to the UK version of the law that distinguished it from the EU version of the law with the same name/number.

The government has published an Act of Parliament that says from 1st January 2024 no one must refer to this law as retained law any longer.

Operators must refer to it as assimilated law.

From 1st January 2024 can you please use the following wording in any document that the law may be referenced.

2023 Amendments

The CAA has stipulated the addition of Regulation (EU) 2019/947 and the AMC/GM to the Reference Documents Table. Details can be found on page 3 of this document.

2022 Amendments

The following amendments should be made to the Operations Manual by means of new sections or amending existing sections.

Additional Emergency Procedures

In addition to the standard emergency procedures contained within the Operations Manual, the following additions are also required.

- Aircraft exiting the operational volume
- Complete loss of flight control
- Complete loss of propulsion
- Abnormal environmental conditions
- Air or ground incursions

The below format is advised for explaining signs and symptoms of the emergency situation, Remote Pilot action, flight crew action, reporting requirements and any operating procedures which

Abnormal Environmental Conditions (Precipitation)				
Sign/ Symptom	RP Action	Flight Crew Action	Reporting	
Precipitation exceeding aircraft IP rating is noticed in the flight area	Inform Crew Follow landing procedure	Inform RP Clear TOLS	ECCAIRS	
Mitigations				



- 1. Operational planning/ risk assessment
- 2. Site survey
- 3. Situation awareness

Abnormal Environmental Conditions (Precipitation)				
Sign/ Symptom	RP Action	Flight Crew Action	Reporting	
Wind speed or turbulence exceeds the operational envelope Aircraft unable to hold position	Inform Crew Consider switching to Sport mode. Follow landing procedure	Inform RP Clear TOLS	ECCAIRS AAIB	

Mitigations

- 1. Operational planning/ risk assessment
- 2. Site survey
- 3. Anemometer on site wind speed measurement
- 4. Situation awareness
- 5. iOSD Warning

Abnormal Environmental Conditions (Temperature)				
Sign/ Symptom	RP Action	Flight Crew Action	Reporting	
Temperature outside of operational envelope	Inform Crew	Inform RP	ECCAIRS	
iOSD temperature warning Loss of battery performance	Consider alternate LS if closer Follow landing procedure	Clear TOLS	AAIB	
RP/Crew to hot/cold to operate effectively				

Mitigations

- 1. Operational planning/ risk assessment
- 2. Site survey
- 3. Thermometer on site temperature measurement (Function of Anemometer)
- 4. Situation awareness
- 5. iOSD Warning



Operations in close proximity to Helicopter Landing Sites

Following an email from the CAA to all UAS Operators on the 21st June 2022, the following statement should be added to the 'Pre-Notification' or nearest equivalent section of the Operations Manual.

"Where a UAS operation takes place in close proximity to a Helicopter Landing Site, a NOTAM request should be submitted to the Airspace Regulation Unit using the online NATS NOTAM form."

Whilst the term 'close proximity' has not been defined, it is recommended to submit a NOTAM for any UAS operation which is proposed to take place within 1 km of any HLS. These are routinely identified during the airspace assessment of operational planning and should be included on the risk assessment. HLS are routinely located at hospitals, conference centers and hotels, although UAS operators are reminded that rotary aviation has the ability to routinely operate below 400ft and land anywhere deemed suitable, such as the Air Ambulance.

UAS operators should submit the NOTAM request form as early as possible to allow suitable time for assessment and publication.

Visual Line of Sight Operating Limitation

Previously, the maximum horizontal distance which an UA could be flown, providing the RP could maintain VLOS was quantified to 500m. This distance has now been removed, but a Remote Pilot should always be able to see their aircraft to such extended, that they can accurately ascertain its orientation at all times. The VLOS aspect of UAS operations is reliant on a numbers factors, not simply limited to the size of UA and the distance flown. It can also include RP eye sight, meteorological conditions and day/ night conditions.

Emergency Response Plan

With the latest amendment to CAP722A, UAS Operators are now required to provide a detailed Emergency Response Plan in Volume 1 of the Operating Safety Case.

The ERP should reflect the size, nature and complexity of activities performed by the organisation. The ERP should:

- Contain the action to be taken by the operator or specified individuals in an emergency.
- Provide for a safe transition from normal to emergency operations and vice versa.
- Ensure coordination with the ERPs of other organisations, where appropriate.
- Describe emergency training / drills as appropriate.

For further details please see CAP 722A - Operating Safety Cases

Areas of Operation

The latest issue of CAP722A and the AMC/GM ORS9 No16 has now included the requirement for UAS Operators to include the use of Emergency Buffer Areas.

Emergency buffer areas, as described in the AMC/GM above, should be established where necessary to protect uninvolved people on the ground or other airspace users from the consequence of a loss of control. The emergency buffer should be large enough to enable activation of the emergency procedures, based on the handling characteristics of the UA, the failure modes identified and the environmental conditions.

For further guidance, please refer to the AMC/GM ORS9 No16

Characteristics of the Operation

The latest issue of CAP722A has now included the requirement for UAS Operators to provide details of their intended operations.



The description should contain all relevant information that demonstrates a detailed understanding of how and where the operation is to be undertaken and the limitations or conditions associated with it. Any other information helpful in explaining the intended operation, such as diagrams or illustrations, should be included in this section.

For further details please see <u>CAP 722A - Operating Safety Cases</u>

Radio Licensing Requirements

It is the responsibility of the UAS operator to ensure that the radio spectrum used for the command-and-control link and for any airborne equipment and payload communications complies with the relevant Ofcom requirements and that any licenses required for its operation have been obtained.

It is also the responsibility of the UAS operator to ensure that the appropriate aircraft radio license has been obtained for any transmitting radio equipment that is installed or carried on the aircraft, or that is used in connection with the conduct of the flight and that operates in an aeronautical band, e.g. EC devices / transponders.

Any radio licenses required for the operation should be included as evidence in the application and appropriately referenced.



Remote Pilot Logbook

The AMC/GM ORS9 No16 has increased the information required to be logged in a Remote Pilot Logbook. The following headings, taken directly from the AMC/GM ORS9 No16, are now required. This logbook should be stored electronically.

- Date
- Aircraft type
- Aircraft identification (registration, if applicable, or serial number)
- Take-off and landing location
- Duration (including whether in daylight, or at night)
- Remote pilot name
- Description of the flight/remarks

It is the responsibility of every Remote Pilot to maintain a Pilot Logbook with their recorded flight time. The CAA specifies the pilot competency requirement of a minimum of 2 hours flight time in 90 days, therefore, the Remote pilots of the applicant organisation should submit their Pilot Logbook with their renewal. Each logbook entry should show the precise flight time of each individual flight conducted using the Minutes: Seconds format (MM:SS).

UAS Technical Logbook

Operations must be logged, using a technical logbook for each aircraft, which must be held on an electronic record. This is to assist with regulatory oversight. This is separate to the RP Logbook requirement.

The information to be recorded must include the following:

- The identification of the UAS (manufacturer, model/variant (e.g. serial number))
 - If the UAS itself is not subject to registration (i.e. not certified), the identification of the UAS may be achieved using the serial number of the UAS
- the date, time, and location of the take-off and landing
- the duration of each flight
- the total number of flight hours/cycles (take off and landings)
- The name of the RP responsible for the flight
- the activity performed (including the OA number, and whether the flight was VLOS or BVLOS)
- any significant incident or accident that occurred during the operation
- a completed pre-flight inspection
- any site risk assessments and radio frequency surveys carried out
- any defects and rectifications
- any repairs and changes to the UAS configuration
- If the aircraft is to be flown in the certified category, the information required to comply with this.

Records must be stored for 3 years in a manner that ensures their protection from unauthorised access, damage, alteration, and theft.

The logbook can be generated in either electronic or paper format. If the paper format is used, it must contain, in a single volume, all the pages needed to log the holder's flight time. When one volume is completed, a new one will be started based on the cumulative data from the previous one.



Legacy Amendments

The following are legacy amendments which remain included within this document due to their relevancy.

Named Remote Pilots

All Remote Pilots that will operate under the Operational Authorisation must be named within the Operations Manual. If there will be more than one Remote Pilot, it is advisable to create a separate appendix detailing their credentials. The Primary Remote Pilot must be named in the Operations Manual as well as the Accountable Manager. It is advisable to add this to the Roles and Responsibilities Section of the document so that the individuals are clearly nominated. If the Accountable Manager and the Remote Pilot is the same person, then this should be articulated as such within the same paragraph for clarity. For Example:

'John Doe is nominated as the Accountable Manager for Sample Design Ltd, and his responsibilities include...'

'John Doe is nominated as the Primary Remote Pilot for Sample Design Ltd, however any individual with the necessary qualifications detailed in Appendix X – Register of Authorised RP, may operate in the capacity of RP. Their responsibilities include...'

Qualification Requirement

The required qualifications to operate under an OA has changed to incorporate the General Visual Line of Sight Certificate (GVC). The following qualifications are now accepted:

- 1. An NQE approved certificate of competence in Remote Pilot theoretical knowledge/ general airmanship syllabus and;
 - An NQE approved certificate of practical flight assessment for the weight class and type of aircraft; or
- 2. An RAE approved General Visual Line of Sight Certificate

Please note that a qualification to operate in the Open Category, namely the A2 Certificate of Competency (A2 CofC) does not entitle a Remote Pilot to operate in the Specific Category under a OA.

In addition, in early 2021, the Department for Transport (DfT) removed the minimum age for Remote Pilots operating in both the Open and Specific Category, therefore, any designated age limitation defined within the Operations Manual should be removed.



Renewal Application

In April 2018, the CAA launched a new online application system for the submission of Operational Authorisations and renewals to replace the SRG1320 application form. The system means that applicants can now submit and pay for their application using a credit or debit card online.

The new application method also prompts the applicant to submit the correct supporting documentation using rejection rules if they are not included. Such documents include the individual or organisations Operations Manual, qualification certificate(s) or equivalent and proof of insurance.

The online application system can be accessed via the **CAA** website.

Operations Manual Renewal Service

Heliguy™ are pleased to offer an Operations Manual renewal service which generates the applicant a new and compliant Operations Manual. The service is designed to significantly reduce the burden of revising the Operations Manual in preparation for renewal. This service is charged at £119 and takes a matter of minutes to complete. The applicant must then familiarise themselves with the document and ensure they understand it in its entirety before submitting to the CAA. If you would like more information about the service, then please contact us.

Conclusion

It is the responsibility of the Accountable Manager to ensure that their UAS OSC is updated in accordance with the development of applicable regulations and legislation. They are also responsible for ensuring that the Operational Authorisation and Insurance Policy do not expire, otherwise UAS operations in the Specific Category must cease.

If you would like to access the heliguy[™] Operations Manual renewal service or would like more information, please contact the heliguy[™] Training Team in the first instance at <u>training@heliguy.com</u> or 0191 296 1024.

If you have found this document useful then why not leave us a review





Frequently Asked Questions

Does the CAA send out a reminder of the expiry/renewal?

No, it is the responsibility of the applicant to monitor the impending expiry of the OA and complete the necessary renewal application.

Where can I check the expiry date of my OA?

The expiry date can be found on the OA issued by the CAA.

Do I need to send all of the operational documentation which I have compiled over the previous year?

No, you are only required to submit your Operations Manual, RP Logbook, certificates of competency and aircraft maintenance records.

What if my OA has already expired?

If your OA has already expired, you must cease UAS operations in the specific category immediately. If you have NQE qualification (to obtain a PfCO), these are no longer accepted for expired renewal applications. You will be required to undertake a PfCO to General Visual Line of Sight Certificate (GVC) conversion course in order to reapply for an OA. If you already have the GVC qualification then you will be required to resubmit your application as a renewal and pay the cost of an initial application.

Do I have to attend a refresher course or renew my NQE qualifications?

Not at the moment however, PfCO qualifications will no longer be accepted and applicants must convert to the General Visual Line of Sight Certificate Course (GVC) before January 2024.

Where can I find a list of CAP which have been updated in the last year?

You can find a list of relevant CAP documents on the <u>CAA website</u>. Notifications are also provided by the CAA SkyWise application.

If I make minor adjustments to my Operation Manual, do I have to resubmit it to the CAA?

Minor changes to the Operations Manual do not require submission to the CAA and can be submitted at the next renewal.

Does heliquy™ offer a service to generate the Operations Manual for me?

Yes, we are pleased to offer our service to generate your document on for you, however you must ensure that you full read and understand the document prior to submission. We will also conduct a human-review of your document to ensure it meets the requirements.

What happens if my application is placed on-hold or rejected?

Applicants that are placed on-hold will be contacted via email by the CAA and have 14 days to make the necessary changes and resubmit the application. Rejected applications may be subject to a fee which can be found within the CAA scheme of charges.