

## **CAR-UAD**

# UNMANNED AIRCRAFT (UA) DEMONSTRATION OPERATIONS

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## **TABLE OF CONTENTS**

TABLE OF CONTENTS	2
Record of Amendement	3
UAD.001 Abbreviations and Definitions	4
GM to UAC.001 (b) (4) Abbreviations and Definitions:	5
UAD.005 Applicability	5
GM to UAD.005 (a) Applicability	5
UAD.010 Application for UOA	5
GM to UAD.010 (c) Application for UOA	6
UAD.015 UA Operators Responsibilities	6
UAD.020 UA pilot license (applicable until 31 December 2023)	7
UAD.020 UA pilot license (applicable from January 2024)	7
UAD.025 Airspace Approval for UA Operations	7
GM to UAD.025 Airspace Approval for UA Operations	8
AMC to UAD.025 (b) Airspace Approval for UA Operations	8
UA.030 Security Rules	8
UAD.035 Occurrence Reporting	8
AMC to UAD.035 Occurrence Reporting	8
UAD.040 UA Operator Authorisation Continued Validity	9
UAD.045 Oversight and Findings	9
GM to UAD.045 Finding Classification and Definitions:	9
UAD.050 Law Enforcement Action	10
GM to UAD.050 Law Enforcement Action	10
UAD.055 Appeal process	10
GM to UAD.055 Appeal process	10





## **Record of Amendement**

Issue Number	Date of Applicability	Reason
Issue 01	August 25, 2020	Initial.
Issue 02	January 31, 2023	Amendment to align this regulation with Federal Decree- Law No. (26) of 2022.
Issue 02 (CORRECTED)	February 28, 2023	Туро





#### **UAD.001 Abbreviations and Definitions**

For the purposes of this Chapter, the following abbreviations and definitions apply:

#### (a) Abbreviations

- (1) AMC: Acceptable Means of Compliance
- (2) GCAA: General Civil Aviation Authority
- (3) LAA: Local Appropriate Authority
- (4) LoC: Letter of Conformity
- (5) MOIAT: Ministry of Industry and Advanced Technology
- (6) UA: Unmanned Aircraft
- (7) UOA: UA Operator Authorisation
- (8) VLOS: Visual Line of Sight

#### (b) Definitions

(1) Acceptable Means of Compliance: Are standards adopted by the GCAA to illustrate means to establish compliance with the CAR's. An entity/or a person wishing not to comply with the AMC must comply using other means accepted by the Authority.

**Note**: Alternative means of compliance are those that propose an alternative to an existing AMC or those that propose new means to establish compliance with the CAR's for which no associated AMC have been adopted by the GCAA.

- (2) **Airspace Approval**: An Authorisation issued by the GCAA or LAA, as the case, to conduct an UA flight operation at specific time and on a specific location and route.
- (3) **Demonstration Operation:** A special flight may be used when conducting customer demonstration flights of a new production aircraft and or other business related purposes.
- (4) **Local Appropriate Authority**: The local authority responsible with regards to the civil aviation affairs in the relevant Emirate.
- (5) **Operator:** An operator engaged in the operation of UA for Demonstration purposes only.
- (6) **Special operation approval**: special approval issued by the GCAA or LAA, as the case, to conduct a Unmanned Aircraft flight operation exceeding operation limitation.
- (7) **UA Operator Authorisation:** is a document issued by GCAA that authorise the operator to conduct UA operation for the registered purpose. This document include list of authorised UAS.
- (8) UA Pilot: means a natural person responsible for safely conducting the flight of a UA by operating its flight controls, either manually or, when the UA flies automatically, by monitoring its course and remaining able to intervene and change its course at any time.
- (9) **Unmanned Aircraft (UA):** An aircraft operated with no pilot on board. An UA may be remotely piloted or autonomously flown.



**Note:** UA includes a broad spectrum of aircraft, from drones, and model radio controlled aircraft, to highly complex remotely piloted aircraft (RPA) and highly automated or autonomous UA.

(10)**VLOS operation:** means a type of UAS operation in which, the remote pilot is able to maintain continuous unaided visual contact with the unmanned aircraft, allowing the remote pilot to control the flight path of the unmanned aircraft in relation to other aircraft, people and obstacles for the purpose of avoiding collisions.

## GM to UAD.001 (b) (4) Abbreviations and Definitions:

LAA of each emirate is the authority responsible for authorization, approval and oversight of the UA operations performed within its territory. If there is no LAA in a specific emirate or the LAA of this emirate is not performing these tasks, the GCAA will be the sole responsible for approval and oversight of the UA operations performed within this emirate.

NOTE: If the operator is based in an emirate; it must communicate and obtain required authorisation and permission from LAA of relevant Emirate. Otherwise the operator shall communicate and obtain required authorisation and permission from GCAA.

## **UAD.005** Applicability

- (a) This CAR prescribes the requirements to be met by operators operating UA for Demonstration purposes.
- (b) This CAR does not apply to:
  - (1) UA operated by military or law enforcement and security agencies (state UA)
  - (2) UA intended for carriage of passengers.

Note: for Recreational, commercial and governmental, experimentation, event operator, or carriage of passengers, refer to:

- CAR UAR- UNMANNED AIRCRAFT RECREATIONAL FLIGHT
- CAR UAC- UNMANNED AIRCRAFT (UA) COMMERCIAL & GOVERNMENTAL OPERATIONS
- CAR UAEX UNMANNED AIRCRAFT (UA) EXPERIMENTATION OPERATIONS
- CAR UAEV UNMANNED AIRCRAFT (UA) EVENT OPERATIONS
- CAR-UAM URBAN AIR MOBILITY OPERATIONS

#### GM to UAD.005 (a) Applicability

Demonstration Operations may include but not limited to, capability for marketing purposes, UA prototype testing, piloting for goods delivery service.

## **UAD.010 Application for UOA**

- (a) No operator shall perform Demonstration UA operation without a valid UA Operator Authorisation (UOA) issued by GCAA or LAA, as the case.
- (b) The application for UOA shall be made in a form and manner established by the GCAA or LAA, as the case.



- (c) Only UAE based operator can be granted UOA. However, the GCAA or LAA may authorize a UAE based operator to contract a non-UAE based UA Operator if there is no UAE UA operator capable of performing the requested mission with acceptable Justification.
- (d) In such case, the UAE based operator is accountable for the contracted non-UAE based UA Operator.
- (e) In order to obtain UOA the operator has to apply through GCAA or LAA registration platform.
- (f) Prior to applying for UOA the applicant shall obtain Letter of Conformity (LoC) for each UA from Ministry of Industry Advanced Technology (MOIAT) e-service.

### GM to UAD.010 (c) Application for UOA

The required process and documents are as following for the non-UAE based UA Operator:

- (a) Invitation letter from government entity or copy of contract/agreement with government entity.
- (b) A description of the proposed operation in company letterhead addressed to GCAA or LAA, as the case, and signed by an authorized representative together with a statement of compliance with GCAA or LAA requirements, as the case. This document must also list the unmanned aircraft type with serial number, colour and mass in KG.
- (c) A copy of company trade license (or equivalent).
- (d) Passport copy of the applicant.

#### **UAD.015 UA Operators Responsibilities**

The operator shall appoint an accountable person who has corporate authority and fund access for ensuring compliance with this CAR and relevant legislation and regulation:

- (a) The operator shall ensure that every UA operation is conducted in accordance with this CAR, and applicable laws (including the Civil Aviation Law of the UAE, Federal Decree Law No. (26) of 2022), and any relevant publication issued by LAA.
- (b) The operator shall ensure that all UA are registered and appropriately insured before commencement of any operation.
- (c) The operator shall notify the GCAA or LAA, as the case, in ssufficient time for any changes concerning the accountable person, operator name, address or contact details, type of UA, fleet size or any change to the type of operations prior to implementing the change.
- (d) The operator shall ensure that all UA instruments and equipment required for safe operation, are available and serviceable and maintained in accordance with the manufacturer and operator's maintenance instructions.
- (e) The operator shall ensure UA Pilot is competent to perform the intended operation and possess the skills and the knowledge about law, regulations and procedures.
- (f) The operator shall establish and implement procedures for the safe operation including the following:
  - (1) The UA Pilot shall ensure Minimum UA Safe Distance from any persons and fixed or mobile objects. The Minimum Safety Distance shall not be less than 50 meters unless prior authorisation has been obtained from the GCAA or LAA, as the case;





- (2) Ensure that the UA is in a safe operating condition for the intended flight.
- (3) Adhere to the conditions stipulated in flying zone map in "My Drone Hub" mobile application
- (g) The following activities are prohibited unless permission obtained from GCAA or LAA or government entities, as the case:
  - (1) Any modification to the UA or its component or system which may affect its initial functionality and specification as per obtained LoC from MOIAT

## **UAD.020 UA pilot license (applicable until 31 December 2023)**

No one shall fly UA in UAE airspace without complying with the following requirements:

- (a) being 18 years minimum unless otherwise accepted by the GCAA or LAA, as the case.
- (b) having successfully complete UA training provided by UA training organisation approved by GCAA or LAA, as the case.
- (c) being UAE resident.

## **UAD.020 UA pilot license (applicable from January 2024)**

No one shall fly UA in UAE airspace without a pilot license issued by GCAA or LAA, as the case. The following are the requirements to obtain a GCAA UA license, but not limited to:

- (a) The applicant shall be of 18 years minimum unless otherwise accepted by the GCAA or LAA, as the case.
- (b) The applicant shall successfully complete UA training provided by UA training organisation approved by GCAA or LAA, as the case.
- (c) The applicant shall be UAE resident.

#### **UAD.025 Airspace Approval for UA Operations**

- (a) The UA operator shall obtain an UA Airspace Approval prior to any UA operation, unless the flight is intended to be conducted within:
  - (1) *Interior Building space:* Airspace inside a building, or within the interior area of a closed stadium or a facility.
  - (2) Exterior Building Airspace: Airspace within 10 meters off the facade or 5 meters above the roof of a building provided the building is located outside airports boundaries/fences and further boundaries defined by Air Navigation Service Provider. If the building is associated with heliport then a prior approval from the heliport operator shall be obtained.
  - (3) **Drone Fly Zone:** Up to date UA fly zone as indicated in the map guidance in "My Drone Hub" mobile application.
- (b) Following airspace approval limitations shall apply to any UA operation, unless a special operation approval is issued by the GCAA or LAA, as the case
  - (1) Operations shall be limited to day time;
  - (2) Operations shall be limited to VLOS operations;
  - (3) Operations shall be limited to 400 ft. height AGL;





- (4) Operations shall be limited to UA with a maximum take-off mass of 25kg;
- (5) No Dangerous Good shall be transported by air.

#### **GM to UAD.025 Airspace Approval for UA Operations**

- (a) Any UA Airspace Approval Application should be submitted through the GCAA or LAA E-Services, as the case.
- (b) Application should be provided 2 weeks minimum before the intended operation/flight.
- (c) All UOA holders have to comply with GCAA and LAA rules and conditions, as the case.

## AMC to UAD.025 (b) Airspace Approval for UA Operations

In order to obtain special operation approval, the operator should submit a Specific Operations Risk Assessment (SORA) to GCAA or LAA, as the case, to evaluate and authorise the operations. Through SORA the operator should demonstrate that the operation can be conducted with an acceptable level of safety.

#### **UAD.030 Security Rules**

- (a) The operator shall ensure compliance with any security requirement mandated by the GCAA, LAA, or any other security agencies.
- (b) The use of aerial photographic apparatus installed on the UA shall not be permitted without a prior authorization from the Security Sector within the GCAA or LAA, as the case.

#### **UAD.035 Occurrence Reporting**

- (a) The operator shall report to the GCAA, any accident and serious incident, through the following hotline: +971506414667 and E-mail: aai@gcaa.gov.ae. Accidents shall be also reported to the local Emirate Police.
- (b) The operator shall report to LAA, any accident and serious incident, through applicable channel.
- (c) The report shall contain all pertinent information, known to the operator, about the accident or serious incident. Reports shall be made within 3 hours from the accident/ serious incident occurrence.
- (d) Where relevant, the operator shall produce a follow-up report to provide details of actions it intends to take to prevent similar occurrences in the future.
- (e) The operator shall report occurences to the GCAA through the ROSI system.

## **AMC to UAD.035 Occurrence Reporting**

The following list while not exhaustive includes types of occurrences involving UA Operations, which shall be reported to the GCAA (by email to <a href="mailto:aai@gcaa.gov.ae">aai@gcaa.gov.ae</a>) and LAA:

- (a) Crashes
- (b) Interferences in signal or control of UA.
- (c) Near miss with a manned aircraft or other UA;
- (d) Collisions with other objects;
- (e) Operation which results in a public nuisance.



- (f) Operations out of the area assigned for UA operation.
- (g) A serious or fatal injury (third parties and own personnel)
- (h) UA lost while operation.

#### GM to UAD.035(e)

a) The operator should comply with AMC-22 "Incident Reporting".

## **UAD.040 UA Operator Authorisation Continued Validity**

- (a) The UA Operator Authorisation (UOA) shall be granted as one off operation authorisation for specific time, as accepted by the GCAA or LAA as the case.
  - (1) The operator remaining in compliance with the applicable requirements and conditions stipulated in the authorisation and in this CAR or any relevant publication issued by LAA, as the case.
  - (2) The validity of GCAA or LAA Security Clearance, as the case.
  - (3) The GCAA or LAA, as the case, is granted access, at any time, to the operator's facility, equipment, document, records, data, procedures or any other material relevant to its activity.
  - (4) The UOA not being surrendered, suspended or revoked.

#### **UAD.045 Oversight and Findings**

Upon obtaining UOA; the operator will be subject to the GCAA or LAA, as the case, surveillance program over the scope, requirement and provision promulgated in this CAR. Any Non-compliance with this regulation will result in findings which are divided into three levels.

#### **GM to UAD.045 Finding Classification and Definitions:**

Level	Description	Timeline for completion of actions by operator	Notes
Level 1	A significant non-compliance, which poses a hazard to UA operational safety or lowers safety standards.  Non-compliance with the CAR, certification requirements, operating in violation of terms and conditions of the approval certificate and Evidence of system failure and repeated level 2 findings shall fall under level 1 category.	Within 7 Calendar Days from day of detection to provide the appropriate corrective action plan	Where a particular Level (1) finding requires an action on the spot, such as grounding an UA, the inspector shall notify verbally, followed by email to the operator pending formal notification from the GCAA.
Level 2	A non-compliance with GCAA rules, or a non-conformance with the operator's procedures, which could possibly hazard the UA operational safety or which could lower safety standards.	Within 60 Calendar Days	It is up to the inspector to reduce or extend the timeline based on the urgency of the CA/PAs or corrective action plan provided by the operator. Where



			practicable the target date should be coordinated and agreed with the auditees
Level 3	Recommendations addressing opportunities for improvements or minor deficiencies, which may lead to potential non-conformances.	Within 90 Calendar Days	Not all Level (3) shall necessarily warrant corrective actions. This is dealt with on a case-to-case basis. The fact that the operator did take note of a particular Level (3) may be enough for the auditor to close it.

#### **UAD.050 Law Enforcement Action**

During oversight inspection and audit, if the evidence indicates that the individual and/or operators has violated the of the relevant federal decree or civil aviation law or regulation or relevant LAA publication, an enforcement action decision and deterrent action shall be applied against the violator.

#### **GM to UAD.050 Law Enforcement Action**

If violation and non-compliance detected, the operator may be subject to one of the following deterrent actions:

- (a) An <u>Administrative action</u> may be taken where an authorised operator violate a provision of this regulation. Administrative action can be:
  - Oral Counselling
  - Warning Letter
  - Restriction of privilege
  - Suspension
  - Revocation
  - Detention, confiscate or Grounding of Unmanned Aircraft
- (b) A <u>Judicial action</u> involves the prosecution of an alleged offender in Civil Court. This usually involves contraventions under the Federal Decree Law (26) 2022.

#### **UAD.055** Appeal process

Appeal process initiated to allow applicant (individual /operator) who feels aggrieved by a decision (Administrative and/or Judicial action) made against them by the GCAA, the right to apply for an appeal against that decision.

Note: The scope of this process excludes any appeal related to aviation security (AVSEC)

## **GM to UAD.055 Appeal process**

The applicant (individual /operator may appeal within 30 days from the date received the Notice of Law Enforcement Action). Guidance to the appeal process can be found in the GCAA website.