



CAR-UAEX

UNMANNED AIRCRAFT (UA) EXPERIMENTATION OPERATIONS

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TABLE OF CONTENTS

TABLE OF CONTENTS	2
RECORD OF AMEDEMMENT	3
UAEX.001 Abbreviations and definitions	4
GM to UAEX.001 (b) (4) Abbreviations and definitions:.....	5
UAEX.005 Applicability	5
UAEX.010 Application for UOA	5
UAEX.015 UA Operator's Responsibilities	6
AMC to UAEX.015 (f) Operator's Responsibilities	7
AMC to UAEX.015 (g) Operator's Responsibilities	7
UAEX.020 UA Pilot License (applicable until 31 December 2023).....	7
UAEX.020 UA Pilot License (applicable from 1 January 2024)	7
UAEX.025 Airspace Approval for UA Operations	8
GM to UAEX.025 Airspace Approval for UA Operations	8
AMC to UAEX.025 (b) Airspace Approval for UA Operations	8
UAEX.030 Security Rules	8
UAEX.035 Occurrence Reporting.....	9
AMC to UAEX.035 Occurrence Reporting.....	9
GM to UAC.035(e) Occurrence Reporting	9
UAEX.040 UA Operator Authorisation Continued Validity.....	9
UAEX.045 Oversight and Findings	10
UAEX.050 Law Enforcement Action	10
GM to UAEX.050 Law Enforcement Action	11
UAEX.055 Appeal process.....	11
GM to UAEX.055 Appeal process	11



RECORD OF AMENDMENT

Issue Number	Date of Applicability	Reason
Issue 1	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	Typo

UAEX.001 Abbreviations and definitions

For the purposes of this CAR, 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) **Experimental Operation:** Operation of UA for the purpose of UA research and development, UA flights to develop new technology, installing a new equipment, experimenting new use of UA and scientific and academic research.
- (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 a UA for experimentation 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 UAEX.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.

UAEX.005 Applicability

(a) This CAR prescribes the requirements to be met by operators operating UA for experimentation purposes only.

(b) This CAR does not apply to:

- (1) UA operated by military or law enforcement agencies (state UA);
- (2) UA intended for carriage of passengers; and
- (3) UA operation for Goods delivery

Note: for Recreational, Commercial & governmental, Demonstration, Event organiser, or Carriage of passengers, refer to:

- CAR UAR - UNMANNED AIRCRAFT RECREATIONAL FIGHT
- CAR UAC- UNMANNED AIRCRAFT (UA) COMMERCIAL & GOVERNMENTAL OPERATIONS
- CAR UAD - UNMANNED AIRCRAFT (UA) DEMONSTRATION OPERATIONS
- CAR UAEV - UNMANNED AIRCRAFT (UA) EVENT OPERATIONS
- CAR-UAM - URBAN AIR MOBILITY OPERATIONS

UAEX.010 Application for UOA

(a) No operator shall perform experimental UA operations 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) In order to obtain UOA the operator shall apply through GCAA or LAA registration platform.
- (d) 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.

UAEX.015 UA Operator's 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.
- (a) The operator shall ensure that all UA are registered appropriately insured before commencement of any operation.
- (b) The operator shall notify the GCAA or LAA, as the case, in sufficient 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.
- (c) The operator shall ensure that all UA instruments and equipment required for safe operation, are available, serviceable and maintained in accordance with the manufacturer and operator's maintenance instructions.
- (d) 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.
- (e) The operator shall ensure that UA(s) are securely stored, and handed-over to pilots in a controlled and documented manner.
- (f) The operator shall establish and implement procedures to control the UA operation records. Records shall be stored in a manner that ensures protection from damage, alteration and theft. Records shall be retained for at least 24 months.
- (g) In addition to the flying condition stipulated in "My Drone Hub" mobile application and the UOA certificate, the operator shall establish and implement procedures for the safe operation including the following:
 - (1) The UA Pilot shall give way to other UA and maintain safe distance from each other and from any manned aircraft at all times and land the UA safely whenever hearing or sighting any manned aircraft in close proximity to the UA operation
 - (2) The UA Pilot shall ensure that operations do not compromise the privacy of legal and natural person and do not cause injury or damage to natural person and properties.
 - (3) The UA Pilot shall ensure Minimum Safe Distance from any persons and fixed or mobile objects and shall not fly above crowds.

- (4) The UA pilot shall ensure that the UA is in a safe operating condition for the intended flight.
- (5) Procedures required to comply with this CAR or any relevant publication issued by LAA, including procedure to deal with emergency and abnormal situation shall be established.

AMC to UAEX.015 (f) Operator's Responsibilities

Records should include, but not limited to the following:

- (a) Flight mission logs containing:
 - i. Date of the flight.
 - ii. Route information/ GPS coordinates.
 - iii. Time of start and End of Flight.
 - iv. Name of Pilot.
 - v. Observations / incidents/ equipment failure.
- (b) GCAA or LAA Airspace Approval, if applicable.
- (c) UA details: UA model, UA serial number, registration, UA weight, UA main colour.
- (d) UA Pilots training certificate and licence.

AMC to UAEX.015 (g) Operator's Responsibilities

The procedures should be easily accessible to concerned staff and should state clear roles and responsibilities of the operator and the UA Pilot.

UAEX.020 UA Pilot License (applicable until 31 December 2023)

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

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

UAEX.020 UA Pilot License (applicable from 1 January 2024)

No one shall fly UA in the UAE airspace unless obtain pilot license issued by GCAA or LAA, as the case. the following provisions shall be met:

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

UAEX.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) The 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; and
 - (5) No Dangerous Goods shall be transported.

GM to UAEX.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.
- d) The operator may apply for long term operational approval for designated area “for example University premises” where the operator wishes to conduct the experimental flights

AMC to UAEX.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.

UAEX.030 Security Rules

- a) The operators shall ensure compliance with any security requirement mandated by the 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.

UAEX.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 occurrences to the GCAA through the ROSI system.

AMC to UAEX.035 Occurrence Reporting

The following list while not exhaustive includes types of occurrences involving UA operations, which should be reported to the GCAA (by email to aai@gcaa.gov.ae) and LAA:

- (a) Crashes
- (b) Interferences with 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 UAEX.035(e) Occurrence Reporting

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

UAEX.040 UA Operator Authorisation Continued Validity

- (a) The UA Operator Authorisation (UOA) shall be valid for one year and its validity is subject to:
 - (1) The Operator remains 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; and
 - (4) The UOA has not being surrendered, suspended or revoked.
- (b) The UA Operator Authorisation (UOA) may be renewed upon to operator's demand.

UAEX.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 UAEX.045 Oversight and Findings

Finding Classification & 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.

UAEX.050 Law Enforcement Action

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



GM to UAEX.050 Law Enforcement Action

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

- 1) An Administrative action 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
- 2) A Judicial action involves the prosecution of an alleged offender in Civil Court. This usually involves contraventions under the Federal Decree Law (26) 2022.

UAEX.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 UAEX.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 website.