

# **Part 137**

## Agricultural aircraft Operations

#### TABLE OF CONTENTS

#### ITEM

#### TITLE

#### **SUBPART A:** General

- 137.1 Authority
- 137.3 Applicability
- <u>137.5</u> Definition of terms

#### **SUBPART B:** Certification Rules

- 137.11 Certificate required
- 137.15 Application for certificate
- 137.17 Amendment of certificate
- 137.19 Certification requirements
- 137.21 Duration of certificate
- <u>137.23</u> Carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances

#### **SUBPART C:** Operating Rules

- 137.29 General
- 137.31 Aircraft requirements
- 137.33 Carrying of certificate
- 137.35 Limitations on private agricultural aircraft operator
- 137.37 Manner of dispensing
- <u>137.39</u> Economic poison dispensing
- 137.41 Personnel
- 137.42 Fastening of safety belts and shoulder harnesses
- 137.43 Operations in controlled airspace designated for an airport
- 137.45 Nonobservance of airport traffic patterns
- 137.47 Operation without position lights
- 137.49 Operations over other than congested areas
- 137.51 Operation over congested areas: General
- 137.53 Operations over congested areas: pilots and aircraft
- 137.55 Business name: commercial agricultural aircraft operator
- 137.57 Availability of certificate
- 137.59 ECAA inspection authority

#### **SUBPART D:** <u>Records and Reports</u>

- 137.71 Records: commercial agricultural aircraft operator
- 137.75 Change of address
- 137.77 Termination of operations

#### <u>SUBPART A</u> <u>General</u>

#### 137.1 Authority

This Part prescribes rules to fulfill the requirements of Art 9 in section 3 of the Egyptian civil aviation law issued on 1981 with respect to agricultural aircraft operations; and prescribes rules to comply with the minimum requirements of the ICAO Annexes.

#### 137.3 Applicability

- This Part prescribes rules governing:
- (a) Agricultural aircraft operations within the Arab Republic of Egypt; and
- (b) The issue of commercial and private agricultural aircraft operator certificates for those operations.

#### 137.5 Definition of terms

For the purpose of this Part:

- (a) Agricultural aircraft operation means the operation of an aircraft for the purpose of:
  - (1) Dispensing any economic poison;
  - (2) Dispensing any other substance intended for plant nourishment, soil treatment, propagation of plant life, or pest control; or
  - (3) Engaging in dispensing activities directly affecting agriculture, horticulture, or forest preservation, but not including the dispensing of live insects;
- (b) Economic poison means:
  - (1) Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, weeds, and other forms of plant or animal life or viruses on or in living man or other animals, which the minister of agriculture shall declare to be a pest; and
  - (2) Any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant.

#### SUBPART B Certification Rules

#### **137.11** Certificate required

No person may conduct agricultural aircraft operations without or in violation of an aircraft operator certificate issued under this Part.

#### **137.15** Application for certificate

An application for an agricultural aircraft operator certificate is made on a form and in a manner prescribed by the ECAA

#### 137.17 Amendment of certificate

- (a) An agricultural aircraft operator certificate may be amended:
  - (1) On the ECASA's own initiative; or
  - (2) Upon application by the holder of that certificate.
- (b) An application to amend an agricultural aircraft operator certificate is submitted on a form and in a manner prescribed by the ECASA, at least 15 days before the proposed amendment effective date.
- (c) The flight Safety Standards sector will grant a request to amend a certificate if it determines that safety in air commerce and the public interest so allow.
- (d) Within 30 days after receiving a refusal to amend, the holder may petition the Chairman of the ECAA, to reconsider the refusal.

#### **137.19** Certification requirements

- (a) Private operator-pilot: The applicant must have available the services of at least one person who holds a current Egyptian private, commercial, or airline transport pilot certificate and be properly rated for the aircraft to be used.
- (b) Commercial operator-pilots: The applicant must have available the services of at least one person who holds a current Egyptian commercial or airline transport pilot certificate and who is properly rated for the aircraft to be used. The applicant himself may be the person available.
- (c) Aircraft: The applicant must have at least one certificated and airworthy aircraft, equipped for agricultural operation.
- (d) Knowledge and skill tests: The applicant must show, or have a person who is designated as the chief supervisor of agricultural aircraft operations for him to show, that he has satisfactory knowledge and skill regarding agricultural aircraft operations, such as:
  - (1) Knowledge of:
    - (i) Steps to be taken before starting operations including survey of the area to be worked;
    - (ii) Safe handling of economic poisons and the proper disposal of used containers for those poisons;
    - (iii) The general effects of economic poisons and agricultural chemicals on plants, animals, and persons with emphasis on those normally used in the areas of intended operations, and the precautions to be observed in using poisons and chemicals;
    - (iv) Primary symptoms of poisoning of persons by economic poisons, the appropriate emergency measures to be taken and the location of the poison control centers;
    - (v) Performance capabilities and operating limitations of the aircraft to be used; and
    - (vi) Safe flight and application procedures.
  - (2) The following maneuvers within the a/c limitations must be flown in the aircraft specified in paragraph (c) above, and at that aircraft's maximum certificated take-off weight, or the maximum weight established for the special purpose load, whichever is greater:
    - (i) Short-field and soft-field takeoffs (airplane and gyroplane only);
    - (ii) Approaches to the working area;
    - (iii) Flare-outs;
    - (iv) Swath runs;
    - (v) Pull-ups and turnarounds; and
    - (vi) Rapid deceleration (quick stops) in helicopters only.

Dated Jan., 2018

#### **137.21 Duration of certificate**

An agricultural aircraft operator certificate is effective for one year, or until it is surrendered, suspended, or revoked whichever occurs first. The holder of an agricultural aircraft operator certificate that is suspended or revoked shall return it to the ECAA.

### 137.23 Carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances

If the holder of a certificate issued under this Part permits any aircraft owned or leased by that holder to be engaged in any operation that the certificate holder knows to be in violation of Part 91, that operation is a basis for suspending or revoking the certificate.

#### SUBPART C Operating Rules

#### 137.29 General

This subpart prescribes rules that apply to persons and aircraft used in agricultural aircraft operations.

#### **137.31** Aircraft requirements

No person may operate an aircraft unless that aircraft:

- (a) Meets the requirements of this Part, and
- (b) Is equipped with a suitable and properly installed shoulder harness for use by each pilot.

#### **137.33** Carrying of certificate

- (a) No person may operate an aircraft unless a copy facsimile of the agricultural aircraft operator certificate, under which the operation is conducted, is carried on that aircraft. It shall be presented for inspection upon the request of any ECASA official representative.
- (b) The registration and Airworthiness certificates issued for the aircraft need not be carried in the aircraft. However, when these certificates are not carried in the aircraft, they shall be kept available for inspection at the base from which the dispensing operation is conducted.

#### 137.35 Limitations on private agricultural aircraft operator

No person may conduct an agricultural aircraft operation under the authority of a private agricultural aircraft operator certificate:

- (a) For compensation or hire;
- (b) Over a congested area; or
- (c) Over any property unless he is the owner or lessee of the property, or has ownership or other property interest in the crop located on that property.

#### 137.37 Manner of dispensing

No persons may dispense, or cause to be dispensed, from an aircraft, any material or substance in a manner that creates a hazard to persons or property on the surface.

#### **137.39** Economic poison dispensing

- (a) Except as provided in paragraph (b) of this section, no person may dispense or cause to be dispensed from an aircraft, any economic poison that is registered with the Egyptian ministry of agriculture:
  - (1) For a use other than that for which it is registered;
  - (2) Contrary to any safety instructions or use limitations on its label; or
  - (3) In violation of any law or regulation in the Arab Republic of Egypt.
- (b) This section does not apply to any person dispensing economic poisons for experimental purposes under:
  - (1) The supervision of an agency authorized by law to conduct research in the field of economic poisons; or
  - (2) A permit from the Egyptian ministry of agriculture.

#### 137.41 Personnel

- (a) Information: The holder of an agricultural aircraft operator certificate shall ensure that each person used in the holder's agricultural operation is informed of that person's duties and responsibilities for the operation.
- (b) Supervisors: No person may supervise an agricultural aircraft operation unless he has met the knowledge and skill requirements of this Part.
- (c) Pilot in command: No person may act as a pilot in command of an aircraft unless he holds a pilot certificate with a rating appropriate to the type of operation conducted. In addition, he must demonstrate to the holder of the agricultural aircraft operator certificate conducting the operation that he has met the knowledge and skill requirements of this Part.

#### 137.42 Fastening of safety belts and shoulder harnesses

No person may operate an aircraft in operations required to be conducted under this Part without a safety belt and shoulder harness properly secured about that person except that he shoulder harness need not be fastened if that person would be unable to perform required duties with the shoulder harness fastened.

#### 137.43 Operations in controlled airspace designated for an airport

- (a) Except for flights to and from the dispensing area, no person may operate an aircraft within the lateral boundaries of the surface area of airspace designated for an airport unless authorization for that operation has been obtained from the ATS facility having jurisdiction over that area.
- (b) No person may operate an aircraft in weather conditions below VFR minimums in airspace area that extends upward from the surface unless authorization for that operation has been obtained from the ATS facility having jurisdiction over that area.

#### 137.45 Nonobservance of airport traffic patterns

The pilot in command of an aircraft may deviate from an airport traffic pattern when authorized by the control tower concerned. At an airport without a functioning control tower, the pilot in command may deviate from the traffic pattern if:

- (a) Prior coordination is made with the airport management concerned;
- (b) Deviations are limited to the agricultural aircraft operation;
- (c) Except in an emergency, landing and takeoffs are not made on ramps, taxies, or other areas of the airport not intended for such use; and
- (d) The aircraft at all times remains clear of, and gives way to, aircraft conforming to the traffic pattern for the airport.

#### **137.47** Operation without position lights

An aircraft may be operated without position lights if prominent unlighted objects are visible for at least one mile and takeoffs and landings at:

- (a) Airports with a functioning control tower are made only as authorized by the control tower operator; and
- (b) Other airports are made only with the permission of the airport management and no other aircraft operations requiring position lights are in progress at that airport.

#### **137.49** Operations over other than congested areas

During the actual dispensing operation including approaches, departures and turnarounds reasonably necessary for the operation, an aircraft may be operated over other than congested areas below 500 feet above the surface and closer than 500 feet to persons, vessels, vehicles, and structures, if the operations are conducted without creating a hazard to persons or property on the surface.

#### 137.51 Operation over congested areas: General

- (a) An aircraft may be operated over a congested area at altitudes required for the proper
  - accomplishment of the agricultural aircraft operation if the operation is conducted;
  - (1) With the maximum safety to persons and property on the surface, consistent with the operation; and
  - (2) In accordance with the requirements of paragraph (b) of this section.
- (b) No person may operate an aircraft over a congested area except in accordance with the requirements of this paragraph:
  - (1) Prior written approval must be obtained from the appropriate official or governing body having jurisdiction over that area;
  - (2) Notice of the intended operation must be given to the public by some effective means, such as daily newspapers, radio, television, or door-to-door notice;
  - (3) A plan for each complete operation must be submitted to, and approved by appropriate personnel of the ECAA having jurisdiction over the area where the operation is to be conducted. The plan must include consideration of the obstructions to flight; the emergency landing capabilities of the aircraft to be used; and any necessary coordination with air traffic control;
  - (4) Single engine aircraft must be operated as follows:
    - (i) Except for helicopters, no person may take off a loaded aircraft, or make a turnaround over a congested area;

- (ii) No person may operate an aircraft over a congested area below the altitudes prescribed in Part 91 except during the actual dispensing operation, including the approaches and departures necessary for that operation;
- (iii) No person may operate an aircraft over a congested area during the actual dispensing operation, including the approaches and departures necessary for that operation, unless it is operated in a pattern and at such an altitude that these aircraft can land, in an emergency, without endangering persons or property on the surface; and
- (v) Multiengine aircraft must be operated as follows:
  - (i) No person may take off a multiengine airplane over a congested area except under conditions that will allow the airplane to be brought to a safe stop within the effective length of the runway from any point on take off up to the time of attaining, with all engines operating at normal takeoff power, 105 percent of the minimum control speed with the critical engine inoperative in the takeoff configuration, whichever is greater, as shown by the accelerate stop distance data. In applying this requirement, takeoff data is based upon still-air conditions, and no correction is made for any uphill gradient of 1 percent or less when the percentage is measured as the difference between the elevation at the end points of the runway divided by the total length. For uphill gradients greater than 1 percent, the effective takeoff length of the runway is reduced 20 percent for each 1-percent grade;
  - (ii) No person may operate a multiengine airplane at a weight greater than the weight that, with the critical engine inoperative, would permit a rate of climb of at least 50 feet per minute at an altitude of at least 1,000 feet above the elevation of the highest ground or obstruction within the area to be worked or at an altitude of 5,000 feet, whichever is higher. For the purposes of this subpart, it is assumed that the propeller of the inoperative engine is in the minimum drag position: that the wing flap and landing gear are in the most favorable positions; and that the remaining engine or engines are operating at the maximum continuous power available; and
- (iii) No person may operate any multiengine aircraft over a congested area below the altitudes prescribed in Part 91 except during the actual dispensing operation, including the approaches, departures, and turnaround necessary for that operation.

#### 137.53 Operations over congested areas: pilots and aircraft

- (a) General: No person may operate an aircraft over a congested area except in accordance with the pilot and aircraft rules of this section.
- (b) Pilots: Each pilot in command must have at least:
  - (1) 25 hours of pilot in command flight time in the make and basic model of the aircraft, at least 10 hours of which must have been acquired within the preceding 12 calendar months; and
  - (2) 100 hours of flight experience as pilot in command in dispensing agricultural materials or chemicals.
- (c) Aircraft:
  - (1) Each aircraft must:
    - (i) If it is an aircraft not specified in the next paragraph; have had within the preceding 100 hours of time in service a 100-hour or annual inspection by a person authorized by Parts 65 or 145, or have been inspected under a progressive inspection system; and
    - (ii) If it is a large or turbine-powered multiengine civil airplane registered in Egypt, have been inspected in accordance with the applicable inspection program requirements of Part 91.
  - (2) If other than a helicopter, it must be equipped with a device capable of jettisoning at least one-half of the aircraft's maximum authorized load of agricultural material within 45 seconds. If the aircraft is equipped with a device for releasing the tank or hopper as a unit, there must be a means to prevent inadvertent release by the pilot or other crewmember.

#### 137.55 Business name: commercial agricultural aircraft operator

No person may operate under a business name that in not shown on his commercial agricultural aircraft operator certificate.

#### 137.57 Availability of certificate

Each holder of an agricultural aircraft operator certificate shall keep that certificate at his home base of operations and shall present it for inspection on the request of the ECAA, or any local law enforcement officer.

#### **173.59 ECAA Inspection Authority**

(a) Each person holds a certificate under this part (or applied for such certificate) shall grant unrestricted and unlimited access for ECAA inspectors to inspect his personnel, facilities, equipment, documents and records to determine:

(1) Eligibility to continue to hold his certificate.

(2) Compliance with this ECAR part

(b) Failure to comply with paragraph (a) above shall be a basis to suspend, withdraw or revoke any certificate issued under this part.

#### SUBPART D Records and Reports

#### 137.71 Records: commercial agricultural aircraft operator

- (a) Each holder of a commercial agricultural aircraft operator certificate shall maintain and keep current, at the home base of operations designated in his application, the following records:
  - (1) The name and address of each person for whom agricultural aircraft services were provided;
  - (2) The date of the service;
  - (3) The name and quantity of material dispensed for each operation conducted; and
  - (4) The name, address, and certificate number of each pilot used in agricultural aircraft operations and the date that pilot met the knowledge and skill requirements of this Part.
- (b) The records required by this section must be kept at least 12 months and made available for inspection by the ECAA upon request.

#### 137.75 Change of address

Each holder of an agricultural aircraft operator certificate shall notify the ECAA in writing in advance of any change in the address of his home base of operations.

#### **137.77** Termination of operations

Whenever a person holding an agricultural aircraft operator certificate ceases operations under this Part, he shall surrender that certificate to the ECAA.