

REPUBLIC OF LEBANON MINISTRY OF TRANSPORT DIRECTORATE GENERAL OF CIVIL AVIATION

LARs

LEBANESE AVIATION REGULATIONS

Part V

AIRWORTHINESS

Republic of Lebanon



LEBANESE AVIATION REGULATIONS (LARs)

Part V – Airworthiness

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REPUBLIC OF LEBANON MINISTRY OF TRANSPORT DIRECTORATE GENERAL OF CIVIL AVIATION

LARs

LEBANESE AVIATION REGULATIONS

<u>Part V</u> AIRWORTHINESS

Subpart 500 INTERPRETATION

Republic of Lebanon



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RECORD OF REVISIONS

	Revision #	Date Entered	Entered By
Date of Revision			
06/08/99	Original		
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Interpretation

500.00 Interpretation

- (1) In these Regulations:
- "Act" means the Aeronautics Act;
- "Accountable manager"- means the manager who has corporate authority for ensuring that all maintenance required by the aircraft operator can be financed and carried out to the standard required by the DGCA. The accountable manager may delegate in writing to another person in the organization, such person then becoming the accountable manager.
- "advanced ultra-light airplane" means an airplane that has a type design that is in compliance with the standards specified in the manual entitled (Standards for Advanced Ultra-light Airplanes) TBD;
- "aerial work" means a commercial air service other than an air transport service or a flight training service;
- "aircraft" means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.
- "aircraft flight manual" means a manual requirements for which may be established by the Minister in Part V, that contains information in respect of an aircraft.
- "airplane" means a power-driven heavier-than-air aircraft that derives its lift in flight from aerodynamic reactions on surfaces that remain fixed during flight;
- "air operator" means the holder of an air operator certificate;
- "air operator certificate" means a certificate issued under Part VII that authorizes the holder of the certificate to operate a commercial air service;
- "air time" means, with respect to keeping technical records, the time from the moment an aircraft leaves the surface until it comes into contact with the surface at the next point of landing;
- "air transport service" means a commercial air service that is operated for the purpose of transporting persons, personal belongings, baggage, goods or cargo in an aircraft between two points;
- "airport" means an aerodrome for which an airport certificate has been issued by the Minister;
- "airship" means a power-driven, lighter-than-air aircraft;
- "airworthiness directive" means an instruction issued by the Minister or by a civil aviation authority responsible for an aeronautical product type design that mandates a maintenance or operation action to ensure that an aeronautical product conforms to its type design and is in a condition for safe operation;
- "airworthiness limitation" means a limitation applicable to an aeronautical product, in the form of a life limit or a maintenance task that is mandatory as a condition of the type certificate;



"airworthy" - in respect of an aeronautical product, means in a fit and safe state for flight and in conformity with its type design;

"AMO" - means an Approved Maintenance Organization.

"appliance" - means any instrument, mechanism, equipment, apparatus or accessory that is

(a) used, or intended to be used, in operating or controlling an aircraft in flight,

(b) installed in or attached to, or intended to be installed in or attached to, the aircraft, and not part of the airframe, engine or propeller of that aircraft; "APU" or "auxiliary power unit" - means any power unit that delivers rotating shaft power or compressed air, or both, and that is not intended for direct propulsion of an aircraft;

"Authority" – means the government organization that has responsibility for Aviation Safety Oversight in a contracting state.

"CAT II minima" - , in respect of an aerodrome, means the minima specified in the Jeppesen Aeronautical Publications for a CAT II precision approach to a runway at that aerodrome; (minimums CAT II)

"CAT III minima" - in respect of an aerodrome, means the minima specified in the Jeppesen Aeronautical Publications for a CAT III precision approach to a runway at that aerodrome; (minimums CAT III)

"category" - means

- (a) when used in reference to flight crew licensing, the classification of aircraft as an airplane, a balloon, a glider, a gyroplane, a helicopter or an ultra-light airplane, and
- (b) when used in reference to the certification of aircraft, a grouping of aircraft based upon intended use or operating limitations such as normal, utility, aerobatic, commuter and transport;

"class" - in relation to the classification of airplanes, means airplanes having similar operating characteristics to single-engined airplanes, multi-engined airplanes, center-line thrust airplanes, land airplanes or sea airplanes;

"Commercial Air Service Standards" - means the standards published under the authority of the Minister that apply in respect of commercial air services operated by air operators;

"company operations manual" - means a manual established by an air operator pursuant to Part VII;

"contracting state" - means a state that is a party to the Convention;

"Convention" - means the Convention on International Civil Aviation signed on behalf of Lebanon at Chicago on December 7, 1944, as amended from time to time;

"crew member" - means a person assigned to duty in an aircraft during flight time;

"elementary work" - means those tasks that are listed as elementary work in Standard 625, Appendix A;



"empty weight" - in respect of an aircraft, means the total weight of the following parts or contents that are part of, or carried on board, the aircraft, namely,

- (a) the airframe, including the rotor in the case of a helicopter or gyroplane,
- (b) the power plant,
- (c) the fixed ballast,
- (d) the unusable fuel,
- (e) the maximum amount of normal operating fluids, including oil, power plant coolant, hydraulic fluid, de-icing fluid and anti-icing fluid but not including potable water, lavatory pre-charge fluid or fluid intended for injection into the engines, and
- (f) all of the installed equipment;

"flight authority" - means a certificate of airworthiness, special certificate of airworthiness, flight permit or validation of a foreign document attesting to an aircraft's fitness for flight, issued under Part V, or a foreign certificate of airworthiness that meets the requirements of Article 31 of the Convention;

"flight crew member" - means a crew member assigned to act as pilot or flight engineer of an aircraft during flight time;

"flight time" - means the time from the moment an aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest at the end of the flight;

"flight training organization" - means

- (a) in the case of an airplane or helicopter, the holder of a flight training organization operator certificate, or
- (b) in the case of a glider, balloon, gyroplane or ultra-light airplane, a club, school or other organization that conducts flight training;

"flight training organization operator certificate" - means a certificate issued under Subpart 6 of Part IV that authorizes the holder of the certificate to operate a flight training organization;

"glider" - means a non-power-driven heavier-than-air aircraft that derives its lift in flight from aerodynamic reactions on surfaces that remain fixed during flight;

"gyroplane" - means a heavier-than-air aircraft that derives its lift in flight from aerodynamic reactions on one or more non-power-driven rotors on substantially vertical axes;

"hang glider" - means a glider that is designed to carry not more than two persons and has a launch weight of 45 kg (99.2 pounds) or less;

"heavier-than-air aircraft" - means an aircraft supported in the atmosphere by lift derived from aerodynamic forces;

"helicopter" - means a power-driven heavier-than-air aircraft that derives its lift in flight from aerodynamic reactions on one or more power-driven rotors on substantially vertical axes;

"IFR" - means instrument flight rules;

"IFR aircraft" - means an aircraft operating in IFR flight;



"land aircraft" - means an aircraft that is not capable of normal operations on water;

"landing" - means

- (a) in respect of an aircraft other than an airship, the act of coming into contact with a supporting surface, and includes the acts immediately preceding and following the coming into contact with that surface, and
- (b) in respect of an airship, the act of bringing the airship under restraint, and includes the acts immediately preceding and following the bringing of the airship under restraint;

"large airplane" - means an airplane with an MCTOW of more than 5,700 kg (12,566 pounds);

"Lebanese Aviation Regulations" - means the Lebanese Aviation Regulations (LARS) published by the Government of Lebanon, as amended from time to time;

"Lebanese Domestic Airspace" means the airspace specified, and delineated as such, in the Aeronautical Information Publication (AIP);

"life-limited part" - means a part that, as a condition of the type certificate, may not exceed a specified time, or number of operating cycles, in service;

"lighter-than-air aircraft" - means an aircraft supported in the atmosphere by its buoyancy;

"limited supplemental type certificate" - means a supplemental type certificate that is applicable only to those aeronautical products that are specified in the certificate by serial number or by some other identification unique to those products and includes a limited type approval;

"maintenance" - means the overhaul, repair, required inspection or modification, or removal and installation of components of, an aeronautical product, but does not include

- (a) elementary work, or
- (b) servicing; (maintenance)

"maintenance release" - means a certification made following the maintenance of an aeronautical product, indicating that the maintenance was performed in accordance with the applicable provisions of these Regulations and the standards of airworthiness;

"maintenance schedule" - means a schedule required pursuant to Section 605.86 of the Lebanese Aviation Regulations (LARs) for the performance of the inspections and other maintenance required by these Regulations;

"major modification" - means an alteration to the type design of an aeronautical product in respect of which a type certificate has been issued that has other than a negligible effect on the weight and center-of-gravity limits, structural strength, performance, power plant operation, flight characteristics or other qualities affecting its airworthiness or environmental characteristics;

"major repair" - means a repair to an aeronautical product in respect of which a type certificate has been issued, that causes the aeronautical product to deviate from the type design defined by the type certificate, where the deviation from the type design has other than a negligible effect on the weight and center-of-gravity limits, structural strength, performance, power plant operation, flight characteristics or other qualities affecting the aeronautical product's airworthiness or environmental characteristics;



"manufacture" - means the making, assembly and fabrication, other than the fabrication of parts as part of a repair, of aeronautical products, and includes, in the case of newly manufactured aircraft, any work performed on an aircraft prior to the issuance of the first certificate of airworthiness or export certificate of airworthiness by the manufacturer;

"manufacturer" - means the holder of a type certificate for an aeronautical product or, where no type certificate has been issued by the Minister, the maker of the aeronautical product;

"manufacturer certificate" - means a certificate that authorizes the holder of the certificate to manufacture an approved aeronautical product;

"maximum permissible take-off weight" - means the maximum take-off weight for an aircraft as authorized by the state of registry of the aircraft, as provided for in the aircraft type certificate or other Flight Authority;

"MCTOW" or "maximum certificated take-off weight" - means the weight identified as such in the type certificate of an aircraft;

"MEL" or "minimum equipment list" - means a document approved by the Minister pursuant to subsection 605.07(3) that authorizes an operator to operate an aircraft with aircraft equipment that is inoperative under the conditions specified therein, and may specify certain equipment that must be operative;

"member state" – means a foreign state that is a party to the convention on international civil aviation;

"model aircraft" - means an aircraft, the total weight of which does not exceed 35 kg (77.2 pounds), that is mechanically driven or launched into flight for recreational purposes and that is not designed to carry persons or other living creatures;

"MOE", means a Maintenance Organization Exposition manual or document.

"operator" - in respect of an aircraft, means the person that has possession of the aircraft as owner, lessee or otherwise;

"operator" - in respect of an airport, means the holder of an airport certificate issued by the Minister, or the person in charge of the airport, whether as employee, agent or representative of the holder of the certificate;

"overhaul" - means a restoration process that includes the disassembly, inspection, repair or replacement of parts, reassembly, adjustment, refinishing and testing of an aeronautical product, and ensures that the aeronautical product is in complete conformity with the service tolerances specified in the applicable instructions for continued airworthiness;

"owner" - in respect of an aircraft, means the person who has legal custody and control of the aircraft;

"passenger" - means a person, other than a crew member, who is carried on board an aircraft;

"powered glider" - means an airplane that, with engines inoperative, has the flight characteristics of a glider;

"primary structure" - means a structure that carries flight, ground or pressure loads;

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"private aircraft" - means an aircraft that is registered as a private aircraft pursuant to the LARs;

"private operator" - means the holder of a private operator certificate;

"private operator certificate" - means a certificate issued under Subpart 4 of Part VI that authorizes the holder of the certificate to operate a Lebanese aircraft for the purpose of transporting passengers;

"repair" - means the rectification of deficiencies in an aeronautical product or the restoration of an aeronautical product to an airworthy condition;

"repair design certificate" - means a document issued by the Minister or a Civil Aviation Authority having jurisdiction over the type design to record the approval of a repair design for an aeronautical product, identified in the document by a serial number or by some other identification unique to the aeronautical product, and that references the documents and data defining the repair design and the limitations and conditions applicable to the aeronautical product as a result of the design change, and includes a repair design approval;

"required inspection" - means an inspection of an aeronautical product that is required by a maintenance schedule, an airworthiness limitation or an airworthiness directive, except where the airworthiness directive specifies that the inspection may be performed by a flight crew member;

"scheduled maintenance" - means any maintenance performed at predetermined intervals pursuant to these Regulations, a maintenance schedule or an airworthiness directive;

"serviceable" - in respect of an aircraft or aircraft part, means fit and safe for flight;

"servicing" - in respect of an aeronautical product, means cleaning, lubricating and the replenishment of fluids not requiring the disassembly of the product;

"small aircraft" - means an airplane having a maximum permissible take-off weight of 5 700 kg (12,566 pounds) or less, or a helicopter having a maximum permissible take-off weight of 2 730 kg (6,018 pounds) or less;

"standard of airworthiness" - in respect of the design, manufacture or maintenance of an aeronautical product, means the description, in terms of a minimum standard, of the properties and attributes of the configuration, material and performance or physical characteristics of that aeronautical product, and includes the procedures to ascertain compliance with or to maintain that minimum standard, as specified in Part V;

"supplemental type certificate" - means a document that is issued by the Minister or the Civil Aviation Authority having jurisdiction over the type design to record the approval of a change to the type design of an aeronautical product and that references the documents and data defining the change and the limitations and conditions applicable as a result of the change and includes a limited supplemental type approval;

"take-off" - means

- (a) in respect of an aircraft other than an airship, the act of leaving a supporting surface, and includes the take-off run and the acts immediately preceding and following the leaving of that surface, and
- (b) in respect of an airship, the act of freeing the airship from restraint, and includes the acts immediately preceding and following the freeing of that airship from restraint;



"transport category aircraft" - means an airplane or a helicopter certified pursuant to LARs Part V, Subpart 515 or an equivalent foreign airworthiness standard;

"type" - means

- (a) when used in reference to personnel licensing, a specific make and model of aircraft, including modifications thereto that do not change its handling or flight characteristics, and
- (b) when used in reference to the certification of aircraft, a classification of aircraft having similar design characteristics;

"type certificate" - means a document issued by the Minister or the Minister or the Civil Aviation Authority having jurisdiction over the type design certifying that the type design of an aircraft, aircraft engine, aircraft propeller or aircraft appliance meets the applicable standards for that aeronautical product, as recorded in the type certificate data sheet, and includes a type approval;

"type design" - means

- (a) the drawings and specifications, and a listing of those drawings and specifications that are necessary to define the design features of an aeronautical product in compliance with the standards applicable to the aeronautical product,
- (b) the information on dimensions, materials and manufacturing processes that is necessary to define the structural strength of an aeronautical product,
- (c) the approved Sections of the aircraft flight manual, where required by the applicable standards of airworthiness,
- (d) the airworthiness limitations Section of the instructions for continued airworthiness specified in the applicable subparts of the Part V and
- (e) any other data necessary to allow, by comparison, the determination of the airworthiness and, where applicable, the environmental characteristics of later aeronautical products of the same type or model;

"ultra-light airplane" - means

- (a) a single-seat airplane that has a launch weight of 165 kg (363.8 pounds) or less, and a wing area, expressed in square meters, of not less than the launch weight minus 15, divided by 10, and in no case less than 10 m2,
- (b) a two-seat instructional airplane that has a launch weight of 195 kg (429.9 pounds) or less, and a wing area, expressed in square meters, of not less than 10 m2 and a wing loading of not more than 25 kg / m2 (5.12 pounds/ft.2), the wing loading being calculated using the launch weight plus the occupant weight of 80 kg (176.4 pounds) per person, or
- (c) an advanced ultra-light airplane;

"unforeseen operational circumstance" means an event, such as unforecast adverse weather, or an equipment malfunction or air traffic control delay, that is beyond the control of an air operator or private operator;