FEDERAL AVIATION AGENCY
WASHINGTON 25, D. C.

February 14, 1962

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 62-7

SUBJECT: Part 1 [New] Definitions and Abbreviations.

The Federal Aviation Agency has under consideration in the recodification of its regulatory material a proposed Part 1 [New] "Definitions and Abbreviations" as set forth in the attached notice which is being published in the Federal Register. It conforms to the "Outline and Analysis" for the proposed recodification contained in Draft Release 61-25 and published in the Federal Register on November 15, 1961 (26 FR 10698).

Copies of the notice are being circulated to afford all interested persons an opportunity to submit comments. Due to the large number of comments we anticipate receiving, we will be unable to acknowledge receipt of each reply. You may be assured, however, that all comments will receive careful consideration. It should be noted that comments must be submitted by March 23, 1962, in duplicate, to the Director of Rules Codification, Federal Aviation Agency, Room B-714, 1711 New York Avenue, N. W., Washington 25, D.C.

James B. Minor

Director, Rules Codification

Attachment

FEDERAL AVIATION AGENCY

[14 CFR Part 1 [New]]

[Draft Release No. 62-7]

Definitions and Abbreviations [New]

Notice is hereby given that there is under consideration a proposal to amend chapter I of title 14 of the Code of Federal Regulations to add a Part 1 "Definitions and Abbreviations [New]", as hereinafter set forth.

Interested persons are invited to participate in the making of the proposed rules by submitting such written data, views, or arguments as they may desire. Communications should be submitted in duplicate to the Director of Rules Codification, Federal Aviation Agency, Room B-714, 1711 New York Avenue, N.W., Washington 25, D.C. All communications received on or before March 23, 1962, will be considered before taking action on the proposed rules. The proposal contained in this notice may be changed in the light of comments received. All comments submitted will be available in the office of the Director of Rules Codification for examination by interested persons.

This proposal is a part of the program of the Federal Aviation Agency to recodify its regulatory material. It conforms to the "Outline and Analysis" for the proposed recodification contained in Draft Release 61-25 and published in the Federal Register on November 15, 1961 (26 FR 10698).

It should be noted that during the life of the codification project, chapter I of title 14 may contain more than one Part bearing the same number. To differentiate between the two, the recodified Parts, such as the one herein proposed, will be labeled "[New]". This label will, of course, be dropped at the completion of the project as all the regulations will be "new".

It must be emphasized that the proposed Part 1 [New] will apply only to new Parts and subchapters of chapter I of title 14 that are published as a part of the recodification program. It will not apply to current "Civil Air Regulations" or to "Regulations of the Administrator". The definitions currently in each regulation will continue to apply to that regulation until it is recodified.

Definitions are presently found in the individual Part to which they apply. The number of terms defined exceeds 450. The number of definitions exceeds 1,200 due to the duplication required in having definitions applicable only to individual Parts. In addition, some definitions add little to an understanding of the defined term (e.g., the definition of "certificated repairman" in § 24.1). Certain definitions are actually substantive rules (e.g., the definition of "continental control area" in § 60.60). The same term may be defined differently in different Parts (e.g., "maintenance" in §§ 18.1 and 25.1). In order to prevent these difficulties from re-occurring, we propose to place all needed definitions in one Part and make them apply across-the-board to all regulations. Part 1 [New] is intended to provide needed definitions of terms that will be used in enough different Parts to warrant standardization and consolidation. This approach has permitted us to reduce the number of definitions to 102.

Definitions, now contained in FAA Regulations, that do not appear in this Part, have been omitted as surplusage or will be executed in revising the Parts to which they apply. The fact that they do not appear in Part 1 [New] does not mean, in each case, that they have been dropped. Many of the terms previously defined will be used without definition since none is necessary (e.g., "calendar month"). In other cases, the term will be used but spelled out so as to make definition unnecessary. Definitions which are actually rules will be positively stated as such in the appropriate Part.

While it might seem preferable to include general definitions of wide applicability in each of the Parts to which they apply to make it unnecessary to refer to more than one Part when dealing with a particular problem, it would be difficult, if not impossible, to maintain uniformity of terminology under such an approach, because changes in a definition in one Part would not be likely to change the corresponding definitions in other Parts. In addition, the extra definitions this would engender would significantly increase the bulk and length of the final product at a time when concerted effort is being made to reduce them.

It is not a significant burden to have to refer occasionally to another Part. If the definitions are standardized to reflect accepted usage and if substantive rules are removed from definition areas and consolidated it should be necessary to refer to the definitions only to clear up occasional, marginal doubts.

Part 1 [New] has been drafted to make the definitions describe as simply and clearly as possible how the defined terms are actually used and understood by FAA and the aviation industry and how, therefore, it is proposed to use them in the recodification. In this process, an attempt has been made to eliminate ambiguity and undesirable vagueness. An attempt has also been made to dovetail related definitions and to make these relationships apparent by treating similar matters similarly and by using, where appropriate, other relevant terms that have been defined, rather than to repeat the substance of those other definitions.

In a few cases, this approach has produced a significantly different definition from any now appearing in the regulations. The new definitions, therefore, are no mere attempts to paraphrase the existing definitions. It should be pointed out in this connection that *since a properly drafted definition is only a tool and a description of how words are actually being used in the document in question, a substantial change from an earlier definition does not necessarily involve a change in the substance of the regulation.* Even when a change in the substance of a definition is involved, *the substance of the regulations can be preserved by making compensatory language changes in the rules to which the definitions respectively apply.*

Throughout, the two principal criteria have been accuracy and clarity, determined so far as possible by existing usage and understanding.

In consideration of the foregoing, it is proposed to amend chapter I of title 14 by adding a Part 1 [New] reading as hereinafter set forth.

This amendment is proposed under the authority of section 313(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a)).



N. E. HALABY,
Administrator.

Issued in Washington, D.C. on February 14, 1962.

Title 14—AERONAUTICS AND SPACE

Chapter I—FEDERAL AVIATION AGENCY

Subchapter A—DEFINITIONS [New]

Part 1—DEFINITIONS AND ABBREVIATIONS [New]

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1.1 General Definitions.
1.2 Abbreviations and Symbols.
1.3 Rules of Construction.

§ 1.1 General definitions.

As used in this chapter—

"Administrator" means the Administrator of the Federal Aviation Agency or any person to whom he has delegated his authority in the matter concerned.

"Aerodynamic coefficients" means nondimensional coefficients for aerodynamic forces and moments.

"Aircraft" means a device that is used or intended to be used for flight in the air.

"Aircraft engine" means an engine that is used or intended to be used in propelling aircraft. It includes engine appurtenances and accessories but does not include propellers.

"Airframe" means the fuselage, booms, nacelles, cowlings, fairings, fixed airfoil surfaces (including wings and empennage), and landing gear of an aircraft and their accessories and controls.

"Airplane" means an engine-driven fixed-wing aircraft heavier than air, that is supported in flight by the dynamic reaction of the air against its wings.

"Airport" means an area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.

"Airship" means an engine-driven lighter-than-air aircraft that can be steered.

"Air traffic" means aircraft operating in the air or on an airport surface exclusive of loading ramps and parking areas.

"Air traffic control" means a service operated to promote the safe, orderly, and expeditious flow of air traffic.

"Air traffic control clearance" means an air traffic control authorization for an aircraft to operate under specified conditions within controlled airspace.

"Air transportation" means interstate, overseas, or foreign transportation or the transportation of mail by aircraft.

"Alternate airport" mean an airport at which an aircraft may land if a landing at the first intended airport becomes inadvisable.

"Appliance" means any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, engine, or propeller.

"Approved", unless used with reference to another person, means approved by the Administrator.

"Autorotation" means a rotorcraft flight condition in which the lifting rotor is driven entirely by action of the air when the rotorcraft is in motion.

"Auxiliary rotor" means a rotor that serves either to counteract the effect of the main rotor torque on a rotorcraft or to maneuver the rotorcraft about one or more of its three principal axes.

"Balloon" means a lighter-than-air aircraft that is not engine driven.

"Brake horsepower" means the power delivered at the propeller shaft of an aircraft engine.

"Calibrated airspeed" means the indicated airspeed of an aircraft, corrected for position and instrument error. Calibrated airspeed is equal to true airspeed in standard atmosphere at sea level.

"Ceiling" means the height above the earth's surface of the lowest layer of clouds or other obscuring phenomena that is reported as "broken", "overcast", or "obscuration", and not as "thin" or "partial".

"Civil aircraft" means aircraft other than public aircraft.

"Controlled airspace" means airspace within which some or all aircraft may be subject to air traffic control.

"Crewmember" means a person assigned to perform duty in an aircraft during flight time.

"Critical altitude" means the maximum altitude in standard atmosphere at which it is possible to maintain, at the maximum continuous rotational speed, either—

(1) the maximum continuous power, for an engine for which this power rating is the same at sea level and at the rated altitude; or

(2) the maximum continuous rated manifold pressure, for an engine whose maximum continuous power is governed by a constant manifold pressure.

"Critical engine" means the engine whose failure would most adversely affect the performance or handling qualities of an aircraft.

"Cruising altitude" means an altitude determined by vertical measurement from mean sea level.

"Dual instruction" means flight instruction received during flight time from a person authorized by this chapter to give flight instruction.

"Equivalent airspeed" means the airspeed of an aircraft corrected for adiabatic compressible flow for the particular altitude. Equivalent airspeed is equal to calibrated airspeed in standard atmosphere at sea level.

"Extended over-water operation" means an operation over water at a horizontal distance of more than 50 miles from the nearest shore line.

"Fireproof"—

(1) with respect to materials and parts used to confine fire in a designated fire zone, means the capacity to withstand heat at least as well as steel, in dimensions appropriate for the purpose for which they are used, under the most severe conditions of fire and duration likely to occur in that zone; and

(2) with respect to other materials and parts, means the capacity to withstand heat at least as well as steel in dimensions for the purpose for which they are used.

"Fire resistant"—

(1) with respect to sheet or structural members, means the capacity to withstand heat at least as well as aluminum alloy in dimensions appropriate for the purpose for which they are used; and

(2) with respect to fluid-carrying lines, other flammable fluid system parts, wiring, air ducts, fittings, and powerplant controls, means the capacity to withstand heat at least as well as aluminum alloy, in dimensions appropriate for the purpose for which they are used, under the heat and other conditions likely to occur at the place concerned.

"Flame resistant" means not susceptible to combustion to the point of propagating a flame, beyond safe limits, after the ignition source is removed.

"Flammable", with respect to a fluid or gas, means susceptible to igniting readily or to exploding.

"Flap extended speed" means the highest speed permissible with wing flaps in a prescribed extended position.

"Flash resistant" means not susceptible to burning violently when ignited.

"Flight crewmember" means a pilot, flight engineer, or flight navigator assigned to duty in an aircraft during flight time.

"Flight level" means a level of constant atmospheric pressure related to a reference datum of 29.92 inches of mercury. Each is stated in three digits that represent hundreds of feet. They are used in 500 foot increments. For example, flight level 250 represents a barometric altimeter indication of 25,000 feet; flight level 255, an indication of 25,500 feet.

"Flight plan" means specified information, relating to the intended flight of an aircraft, that is filed orally or in writing with air traffic control.

"Flight time" means the time from the moment the aircraft first moves under its own power for the purpose of flight until the moment it comes to rest at the next point of landing. ("Block-to-block" time.)

"Flight visibility" means the average forward horizontal distance, from the cockpit of an aircraft in flight, at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night.

"Foreign air carrier" means any person other than a citizen of the United States, who undertakes directly, by lease or other arrangement, to engage in air transportation.

"Foreign air transportation" means the carriage by aircraft of persons or property as a common carrier for compensation or hire, or the carriage of mail by aircraft, in commerce between a place in the United States and any place outside of the United States, whether that commerce moves wholly by aircraft or partly by aircraft and partly by other forms of transportation.

"Glider" means a heavier-than-air aircraft, that is supported in flight by the dynamic reaction of the air against its lifting surfaces and whose free flight does not depend principally on an engine.

"Ground visibility" means prevailing horizontal visibility near the earth's surface as reported by the United States Weather Bureau or an accredited observer.

"Gyrodyne" means a rotorcraft whose rotors are normally engine-driven for takeoff, hovering, and landing, and for forward flight through part of its speed range, and whose means of propulsion, consisting usually of conventional propellers, is independent of the rotor system.

"Gyroplane" means a rotorcraft whose rotors are not engine-driven, except for initial starting, but are made to rotate by action of the air when the rotorcraft is moving; and whose means of propulsion, consisting usually of conventional propellers, is independent of the rotor system.

"Helicopter" means a rotorcraft that depends principally for its horizontal motion on its engine-driven rotors.

"Heliport" means an area of land, water, or structure used or intended to be used for the landing and takeoff of helicopters.

"IFR conditions" means weather conditions below the minimum for flight under visual flight rules.

"Indicated airspeed" means the speed of an aircraft as shown on its pitot static airspeed indicator calibrated to reflect standard atmosphere adiabatic compressible flow at sea level uncorrected for airspeed system errors.

"Instrument" means a device using an internal mechanism to show visually or aurally the attitude, altitude, or operation of an aircraft or aircraft part. It includes electronic devices for automatically controlling an aircraft in flight.

"Interstate air transportation" means the carriage by aircraft of persons or property as a common carrier for compensation or hire, or the carriage of mail by aircraft, in commerce—

(1) between a place in a State or the District of Columbia and another place in another State or the District of Columbia;

(2) between places in the same State through the airspace of any place outside that State; or

(3) between places in the same possession of the United States;

whether that commerce moves wholly by aircraft or partly by aircraft and partly by other forms of transportation.

"Landing gear extended speed" means the maximum speed at which an aircraft can be safely flown with the landing gear extended.

"Landing gear operating speed" means the maximum speed at which the landing gear can be safely extended or retracted.

"*Large aircraft*" *means aircraft of more than 12,500* pounds, maximum certificated takeoff weight.

"Lighter-than-air aircraft" means aircraft that can rise and remain suspended by using contained gas weighing less than the air that is displaced by the gas.

"Mach number" means the ratio of true airspeed to the speed of sound.

"Main rotor" means the rotor that supplies the principal lift to a rotorcraft.

"Maintenance" includes inspection, overhaul, repair, preservation, and the replacement of parts.

"Major alteration" means an alteration—

(1) that might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

(2) that is not done according to accepted practices or cannot be done by elementary operations.

"Major repair" means a repair—

(1) that, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

(2) that is not done according to accepted practices or cannot be done by elementary operations.

"Manifold pressure" means absolute pressure as measured at the appropriate point in the induction system and usually expressed in inches of mercury.

"Maximum continuous power"—

(1) with respect to reciprocating engines, *means the brake horsepower that is developed in* standard atmosphere at a specified altitude under the maximum conditions of crankshaft rotational speed and engine manifold pressure, and approved for use of unrestricted duration; and

(2) with respect to turbine engines, means the brake horsepower that is developed at a specified altitude, atmospheric temperature, and flight speed under the maximum conditions of rotor shaft rotational speed and gas temperature, and approved for use of unrestricted duration.

"Maximum continuous thrust", with respect to turbine engines, means the jet thrust that is developed at a specified altitude, atmospheric temperature, and flight speed under the maximum conditions of rotor shaft rotational speed and gas temperature, and approved for use of unrestricted duration.

"Medical certificate" means acceptable evidence of physical fitness on a form prescribed by the Administrator.

"Minor alteration" means an alteration other than a *major alteration.*

"Minor repair" means a repair other than a major repair.

"Navigable airspace" means airspace at and above the minimum flight altitudes prescribed by or under this chapter, including airspace needed for safe takeoff and landing.

"Night" means the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time.

"Operate", with respect to aircraft, means use, cause to use, or authorize to use aircraft for the purpose of air navigation, including the piloting of aircraft, with or without the right of legal control (as owner, lessee, or otherwise.)

"Operational control", with respect to a flight, means the exercise of authority over initiating, conducting, or terminating a flight.

"Overseas air transportation" means the carriage by aircraft of persons or property as a common carrier for compensation or hire, or the carriage of mail by aircraft, in commerce—

(1) between a place in a State or the District of Columbia and a place in a possession of the United States; or

(2) between a place in a possession of the United States and a place in another possession of the United States;

whether that commerce moves wholly by aircraft or partly by aircraft and partly by other forms of transportation.

"Parachute" means a device used or intended to be used to retard the fall of a body or object through the air.

"Passenger" means an occupant of an aircraft in flight other than a crewmember.

"Person" means an individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity. It includes a trustee, receiver, assignee, or similar representative of any of them.

"Pilot" means a person who holds a pilot certificate.

"Pilotage" means navigation by visual reference to landmarks.

"Pilot in command" means the pilot responsible for the operation and safety of an aircraft during flight time.

"Pitch setting" means the propeller blade setting as determined by the blade angle when measured in a manner, and at a radius, specified by the instruction manual for the propeller.

"Positive control" means control of all air traffic, within designated airspace, by air traffic control.

"Preventive maintenance" means simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations.

"Prohibited area" means designated airspace within which the flight of aircraft is prohibited.

"Propeller" means a device for propelling an aircraft that has blades on an engine-driven shaft and that, when rotated, produces by its action on the air, a thrust approximately perpendicular to its plane of rotation. It includes control components normally supplied by the manufacturer.

"Public aircraft" means aircraft used only in the service of a government, or a political subdivision. It does not include such an aircraft engaged in carrying persons or property for commercial purposes.

"Rating" means a statement that, as a part of certificate, sets forth special conditions, privileges, or limitations.

"Reporting point" means a geographical location in relation to which the position of an aircraft is reported.

"Restricted area" means airspace designated under Part ------ [608] of this chapter within which the flight of aircraft, while not wholly prohibited, is subject to restriction.

"Rotorcraft" means a heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors.

"Route segment" means a part of a route. Each end of that part is identified by—

(1) a continental or insular geographical location;

(2) a point at which a special aid to air navigation is located; or

(3) a point at which a definite radio fix can be established.

"Second in command" means a pilot who is designated to be second in command of an aircraft during flight time.

"Small aircraft" means aircraft of 12,500 pounds or less, maximum certificated takeoff weight.

"Solo flight time" means flight time during which a pilot is the only occupant of the aircraft.

"Standard atmosphere" means atmosphere in which—

(1) the air is a dry perfect gas;

(2) the temperature at sea level is 59 degrees Fahrenheit;

(3) the pressure at sea level is 29.92 inches Hg.;

(4) the temperature gradient from sea level to the altitude at which the temperature is −69.7 degrees Fahrenheit is −0.003566 degrees Fahrenheit per foot and zero above that altitude; and

(5) the density ρ_o at sea level under the conditions described in clauses (1)–(4) is 0.002377 lb. sec. 2/ft.4.

"Takeoff power"—

(1) with respect to reciprocating engines, means the brake horsepower that is developed under standard sea level conditions, and under the maximum conditions of crankshaft rotational speed and engine manifold pressure approved for the normal takeoff, and limited in use to the maximum continuous period shown in the approved engine specification; and

(2) with respect to turbine engines, means the brake horsepower that is developed under static conditions at a specified altitude and atmospheric temperature, and under the maximum conditions of rotor shaft rotational speed and gas temperature approved for the normal takeoff, and limited in use to the maximum continuous period shown in the approved engine specification.

"Takeoff thrust", with respect to turbine engines, means the jet thrust that is developed under static conditions at a specific altitude and atmospheric temperature under the maximum conditions of rotor-shaft rotational speed and gas temperature approved for the normal takeoff, and limited in use to the maximum continuous period shown in the approved engine specification.

"Time in service", with respect to maintenance time records, means the time from the moment an aircraft leaves the surface of the earth until it touches it at the next point of landing.

"True airspeed" means the airspeed of an aircraft relative to undisturbed air. True airspeed is equal to estimated airspeed $(\rho_o/\rho)^{1/2}$.

"Traffic pattern" means the prescribed path for the operation of an aircraft landing at, taxiing on, or taking off from, an airport.

"United States", in a geographical sense, means (1) the States, the District of Columbia, Puerto Rico, and the possessions, including the territorial waters, and (2) the airspace of those areas.

"United States air carrier" means a citizen of the United States who undertakes directly by lease or other arrangement, to engage in air transportation.

§ 1.2 Abbreviations and symbols.

In this chapter—

"ATC" means air traffic control.

"CAS" means calibrated airspeed.

"CONSOL or CONSOLAN" means a kind of low or medium frequency long range navigational aid.

"DME" means distance measuring equipment compatible with TACAN.

"FAA" means Federal Aviation Agency.

"FM" means fan marker.

"ICAO" means International Civil Aviation Organization.

"IFR" means instrument flight rules.

"ILS" means instrument landing system.

"INT" means intersection.

"LMM" means compass locator at middle marker.

"LOM" means compass locator at outer marker.

"MAA" means maximum authorized IFR altitude.

"MEA" means minimum en route IFR altitude.

"MM" means ILS middle marker.

"MSL" means mean sea level.

"OM" means ILS outer marker.

"RBN" means radio beacon.

"RR" means low or medium frequency radio range station.

"TACAN" means ultra-high frequency tactical air navigational aid.

"TVOR" means very high frequency terminal omnirange station.

"VFR" means visual flight rules.

"VHF" means very high frequency.

"VOR" means very high frequency omnirange station.

"VORTAC" means collocated VOR and TACAN.

§ 1.3 Rules of construction.

(a) In this chapter, unless the context requires otherwise—

(1) words importing the singular include the plural;

(2) words importing the plural include the singular;

(3) words importing the masculine gender include the feminine; and

(4) the present tense includes the future tense.

(b) In this chapter the word—

(1) "shall" is used in an imperative sense;

(2) "may" is used in a permissive sense to state authority or permission to do the act prescribed, and the words "no person may . . ." or "a person may not . . ." mean that no person is required, authorized, or permitted to do the act prescribed; and

(3) "includes" means "includes but is not limited to".