CIVIL AIR REGULATIONS

PART 60
AIR TRAFFIC RULES

As Amended to September 10, 1955

CIVIL AERONAUTICS BOARD

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TITLE 14—CIVILIAN AVIATION

Chapter I—Civil Aeronautics Board

Subchapter A—Civil Air Regulations

PART 60—AIR TRAFFIC RULES

REVISION OF PART

Because of the number of outstanding amendments to Part 60, it has been decided to issue a revision of this part incorporating all amendments thereto in effect on September 10, 1955.

Attention is called to the fact that all definitions in § 60.60 have been arranged alphabetically, without section numbers. Since this change is minor in nature and imposes no additional burden on any person, notice and public procedure hereon are unnecessary and the revised part may be made effective on less than 30 days' notice.

In consideration of the foregoing, the Civil Aeronautics Board hereby revises Part 60 of the Civil Air Regulations (14 CFR Part 60, as amended) as attached hereto, effective on September 10, 1955.

By the Civil Aeronautics Board.

[SEAL] M. C. MULLIGAN,
Secretary.

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DEFINITIONS

60.60 Definitions.

AUTHORITY: §§ 60.1 to 60.60 issued under sec. 205, 52 Stat. 984; 49 U. S. C. 425. Interpret or apply sec. 601, 52 Stat. 1007, as amended; 49 U. S. C. 551.

NOTE: The statements contained in the notes in this part are intended as explanation only and shall not be construed as official interpretations of the regulations.

GENERAL

§ 60.1 *Scope.* The air traffic rules in this part shall apply to aircraft operated anywhere in the United States, including the several States, the District of Columbia, and the several Territories and possessions of the United States, including the territorial waters and the overlying airspace thereof, except:

(a) Military aircraft of the United States armed forces when appropriate military authority determines that noncompliance with this part is required and prior notice thereof is given to the Administrator, and

(b) Aircraft engaged in special flight operations, requiring deviation from this part, which are conducted in accordance with the terms and conditions of a certificate of waiver issued by the Administrator.

NOTE: Specific operations which cannot be conducted within the provisions of the regulations in this part, such as air races, air meets, acrobatic flights, or certain pest control or seeding operations require, prior to commencement of the operation, a certificate of waiver which may be obtained from the nearest office of CAA.

§ 60.1a *Operation over the high seas.* Aircraft of United States registry operated in air commerce shall while over the high seas comply with the provisions of Annex 2 (Rules of the Air) to the Convention on International Civil Aviation.

NOTE: An airman who complies fully with Part 60 while over the high seas will also be in compliance with Annex 2. Under Article 12 of the Convention on International Civil Aviation, the member states undertake to make their regulations conform to the greatest possible extent to the ICAO Annexes. It may therefore be expected that the provisions of Annex 2 will be generally applicable to flight over the territory of member states of the International Civil Aviation Organization.

§ 60.2 *Authority of the pilot.* The pilot in command of the aircraft shall be directly responsible for its operation and shall have final authority as to operation of the aircraft. In emergency situations which require immediate decision and action the pilot may deviate from the rules prescribed in this part to the extent required by consideration of safety. When such emergency authority is exercised, the pilot, upon request of the Administrator, shall file a written report of such deviation. In an emergency situation which results in no deviation from the rules prescribed in this part but which requires air traffic control to give priority to an aircraft, the pilot of such aircraft shall make a report within 48 hours of such emergency situation to the nearest regional office of the Administrator.

GENERAL FLIGHT RULES (GFR)

§ 60.10 *Application.* Aircraft shall be operated at all times in compliance with the following general flight rules and also in compliance with either the visual flight rules or the instrument flight rules, whichever are applicable.

§ 60.11 *Preflight action.* Before beginning a flight, the pilot in command of the aircraft shall familiarize himself with all available information appropriate to the intended operation. Preflight action for flights away from the vicinity of an airport, and for all IFR flights, shall include a careful study of available current weather reports and forecasts, taking into consideration fuel requirements, an alternate course of action if the flight cannot be completed as planned, and also any known traffic delays of which he has been advised by air traffic control.

§ 60.12 *Careless or reckless operation.* No person shall operate an aircraft in a careless or reckless manner so as to endanger the life or property of others.

NOTE: Examples of aircraft operations which may endanger the lives or property of others are:

(a) Any person who "buzzes", dives on, or flies in close proximity to a farm, home, any structure, vehicle, vessel, or group of persons on the ground. In rural districts the flight of aircraft at low altitude often causes injury to livestock. A pilot who engages in careless or reckless flying and who does not own the aircraft which he is flying unduly endangers the aircraft, the property of another.

(b) The operation of aircraft at an insufficient altitude endangers persons or property on the surface or passengers within the aircraft. Such a flight may also constitute a violation of § 60.17.

(c) Lack of vigilance by the pilot to observe and avoid other air traffic. In this respect, the pilot must clear his position prior to starting any maneuver, either on the ground or in flight.

(d) Passing other aircraft too closely.

(e) An operation conducted above a cloud layer in accordance with VFR minimums which results in the pilot becoming involved in instrument flight, unless the pilot possesses a valid instrument rating, the aircraft is properly equipped for instrument flight, and all IFR requirements are observed.

§ 60.13 *Avoidance of prohibited and restricted areas*—(a) *Prohibited area.* No person shall operate an aircraft within a prohibited area unless prior permission has been obtained from appropriate authority.

(b) *Restricted area.* No person shall operate an aircraft within a restricted area contrary to the restrictions imposed unless prior permission has been obtained from appropriate authority.

NOTE: Prohibited and restricted areas are established in order to conduct certain essential activities either on the ground or within the airspace area. Avoidance of prohibited areas and operation within restricted areas strictly in accordance with the published restrictions are imperative to the safety of flight or the protection of the activity on the ground. Any person desiring to secure permission to fly in such areas contrary to the prohibition or the restrictions imposed, should contact the agency controlling that area. Prohibited and restricted areas, indicating the prohibitions or restrictions to flight and the name of the using agency, are shown on aeronautical charts or in publications of aids to air navigation.

§ 60.13a *Authority for designation of restricted areas by the Administrator.* The Administrator is authorized to designate restricted areas when he finds that a hazard to aircraft in flight exists. (Areas previously designated as danger areas will hereafter be designated as restricted areas.)

§ 60.14 *Right-of-way.* An aircraft which is obliged by the following rules to keep out of the way of another shall avoid passing over or under the other, or crossing ahead of it, unless passing well clear:

NOTE: Right-of-way rules do not apply when, for reasons beyond the pilot's control, aircraft cannot be seen due to restrictions of visibility. The aircraft which has the right-of-way will normally maintain its course and speed, but nothing in this part relieves the pilot from the responsibility for taking such action as will best aid to avert collision.

(a) *Distress.* An aircraft in distress has the right-of-way over all other air traffic:

(b) *Converging.* Aircraft converging shall give way to other aircraft of a different category in the following order: airplanes and rotorcraft shall give way to airships, gliders, and balloons; airships shall give way to gliders and balloons; gliders shall give way to balloons. When two or more aircraft of the same category are converging at approximately the same altitude, each aircraft shall give way to the other which is on its right. In any event, mechanically driven aircraft shall give way to aircraft which are seen to be towing other aircraft;

NOTE: In effect, an aircraft will give way to another of a different class which is less maneuverable and is unable to take as effective action to avoid collision. For this reason aircraft towing others are given the right-of-way.

(c) *Approaching head-on.* When two aircraft are approaching head-on, or approximately so, each shall alter its course to the right;

(d) *Overtaking.* An aircraft that is being overtaken has the right-of-way, and the overtaking aircraft, whether climbing, descending, or in horizontal flight, shall keep out of the way of the other aircraft by altering its course to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear;

NOTE: Passing an overtaken aircraft on the right is required because the pilot in side-by-side, dual-control aircraft is seated on the left and has a better view on that side. Further, in narrow traffic lanes, passing on the left of an overtaken aircraft would place the overtaking aircraft in the path of the oncoming traffic.

(e) *Landing.* Aircraft, while on final approach to land, or while landing, have the right-of-way over other aircraft in flight or operating on the surface. When two or more aircraft are approaching an airport for the purpose of landing, the aircraft at the lower altitude has the right-of-way, but it shall not take advantage of this rule to cut in in front of another which is on final approach to land, or to overtake that aircraft.

NOTE: Pilots must recognize that once committed to a landing in certain aircraft the pilot has little chance to avoid other aircraft which may interfere with that landing and, therefore, careful observance of this rule is important to the safety of all concerned.

§ 60.15 *Proximity of aircraft.* No person shall operate an aircraft in such proximity to other aircraft as to create a collision hazard. No person shall operate an aircraft in formation flight when passengers are carried for hire. No aircraft shall be operated in formation flight except by prearrangement between the pilots in command of such aircraft.

§ 60.16 *Acrobatic flight.* No person shall engage in acrobatic flight:

(a) Over congested areas of cities, towns, settlements, or over an open-air assembly of persons, or

(b) Within any civil airway or control zone, or

(c) When the flight visibility is less than 3 miles, or

(d) Below an altitude of 1,500 feet above the surface.

NOTE: Acrobatic maneuvers performed over a congested area or an open assembly of persons, or in areas where considerable air traffic exists, creates an undue hazard to persons or property. Flight visibility of at least 3 miles is believed to be a prerequisite to acrobatic flight in order that the pilot, after scanning the entire vicinity, may be reasonably assured that no other aircraft is within dangerous proximity prior to performing such maneuvers.

§ 60.17 *Minimum safe altitudes.* Except when necessary for take-off or landing, no person shall operate an aircraft below the following altitudes:

(a) *Anywhere.* An altitude which will permit, in the event of the failure of a power unit, an emergency landing without undue hazard to persons or property on the surface;

(b) *Over congested areas.* Over the congested areas of cities, towns or settlements, or over an open-air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet from the aircraft. Helicopters may be flown at less than the minimum prescribed herein if such operations are conducted without hazard to persons or property on the surface and in accordance with paragraph (a) of this section; however, the Administrator, in the interest of safety, may prescribe specific routes and altitudes for such operations, in which event helicopters shall conform thereto;

NOTE: The rule recognizes the special flight characteristics of the helicopter which can accomplish an emergency landing within a relatively small space. However, if a helicopter is flown over the congested area of a city, town or settlement, at less than 1,000 feet above the highest obstacle, the pilot is required to fly with due regard to places in which an emergency landing can be made with safety and, further, to maintain an altitude along the flight path thus selected from which such an emergency landing can be effected at any time.

(c) *Over other than congested areas.* An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In such event, the aircraft shall not be operated closer than 500 feet to any person, vessel, vehicle, or structure. Helicopters may be flown at less than the minimums prescribed herein if such operations are conducted without hazard to persons or property on the surface and in accordance with paragraph (a) of this section;

NOTE: When flight is necessary at an altitude of less than 500 feet above the surface, the pilot must avoid creating any hazard to persons or property on the surface which may result from such flight. In no event should the pilot expose his passengers to unnecessary hazard while engaging in flight at low altitude. The maneuverability of the helicopter permtis safe flight below the minimums required in § 60.17, provided good judgment and caution are exercised by the pilot.

(d) *IFR operations.* The minimum IFR altitude established by the Administrator for that portion of the route over which the operation is conducted. Such altitude shall be that which the safe conduct of flight permits or requires considering the character of the terrain being traversed, the meteorological services and navigational facilities available, and other flight conditions. Where the Administrator has not established such a minimum, operations shall be conducted at not less than 1,000 feet above the highest obstacle within a hor-

izontal distance of 5 miles from the center of the course intended to be flown.

NOTE: When minimum altitudes are established by the Administrator for particular routes, such altitudes will be published in Parts 609 and 610 of this title, and also may be found in the Approach and Landing Charts and Radio Facility Charts of the Coast and Geodetic Survey, and in the Airman's Guide.

NOTE: Civil Air Regulations, Interpretation 1, 19 F. R. 4602, July 27, 1954, provides in part as follows:

"The Board construes the words 'Except when necessary for take-off or landing, no person shall operate an aircraft below the following altitudes, where such words appear in § 60.17 of the Civil Air Regulations, as establishing a minimum altitude rule of specific applicability to aircraft taking off and landing. It is a rule based on the standard of necessity, and applies during every instant that the airplane climbs after take-off and throughout its approach to land. Since this provision does prescribe a series of minimum altitudes within the meaning of the act, it follows, through the application of section 3, that an aircraft pursuing a normal and necessary flight path in climb after take-off or in approaching to land is operating in the navigable airspace."

§ 60.18 *Operation on and in the vicinity of an airport.* Aircraft shall be operated on and in the vicinity of an airport in accordance with the following rules:

(a) When approaching for landing, all turns shall be made to the left unless the airport displays standard visual markings approved by the Administrator and which indicate that all turns are to be made to the right, or unless otherwise authorized by air traffic control;

NOTE: Where right-hand turns and clockwise flow of traffic are desirable in the interest of safety, airport markings visible from the air will inform the transient pilot of the necessity for making turns to the right.

(b) If air traffic control is in operation at the airport, contact shall be maintained with such control, either visually or by radio, to receive any air traffic control instructions which may be issued;

(c) Aircraft operating from an airport shall conform to the traffic patterns prescribed for that airport;

(d) The Administrator may, when necessary in the interest of safety, prescribe traffic patterns for an airport which shall supersede any other traffic patterns previously prescribed;

(e) When light signals are used for the control of air traffic, they shall be of the color and have the meaning prescribed by the Administrator.

NOTE: Light signals and their meanings are published in the CAA Flight Information Manual, for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

§ 60.19 *Air traffic control instructions.* No person shall operate an aircraft contrary to air traffic control instructions in areas where air traffic control is exercised.

§ 60.20 *Notification of arrival.* If a flight plan has been filed, the pilot in command of the aircraft, upon landing or completion of the flight, shall file an arrival or completion notice with the nearest Civil Aeronautics Administration communications station or control tower.

§ 60.21 *Adherence to air traffic clearances.* When an air traffic clearance has been obtained under either the VFR or IFR rules, the pilot in command of the aircraft shall not deviate from the provisions thereof unless an amended clearance is obtained. In case emergency authority is used to deviate from the provision of an air traffic clearance, the pilot in command shall notify air traffic control as soon as possible and, if necessary, obtain an amended clearance. However, nothing in this section shall prevent a pilot, operating on an IFR traffic clearance, from notifying air traffic control that he is canceling his IFR flight plan and proceeding under VFR: *Provided*, That he is operating in VFR weather conditions when he takes such action.

§ 60.22 *Water operations.* An aircraft operated on the water shall, insofar as possible, keep clear of all vessels and avoid impeding their navigation. The following rules shall be observed with respect to other aircraft or vessels operated on the water:

(a) *Crossing.* The aircraft or vessel which has the other on its right shall give way so as to keep well clear;

(b) *Approaching head-on.* When aircraft, or an aircraft and vessel, approach head-on, or approximately so, each shall alter its course to the right to keep well clear;

(c) *Overtaking.* The aircraft or vessel which is being overtaken has the right-of-way, and the one overtaking shall alter its course to keep well clear;

(d) *Special circumstances.* When two aircraft, or an aircraft and vessel, approach so as to involve risk of collision, each shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.

NOTE: The rules for operating aircraft on the surface of the water conform to marine rules for the operation of vessels. The "Special circumstances" rule is provided for situations wherein it may be impracticable or hazardous for a vessel or another aircraft to bear to the right because of depth of a waterway, wind conditions, or other circumstances.

§ 60.23 *Aircraft lights.* Between sunset and sunrise:

(a) All aircraft in flight or operated on the ground or under way on the water shall display position lights;

(b) All aircraft parked or moved within or in dangerous proximity to that portion of any airport used for, or available to, night flight operations shall be clearly illuminated or lighted, unless the aircraft are parked or moved in an area marked with obstruction lights;

(c) All aircraft at anchor shall display anchor lights, unless in an area within which lights are not required for vessels at anchor; and

(d) Within the Territory of Alaska the lights required in paragraphs (a), (b), and (c) of this section shall be displayed during those hours specified and published by the Administrator.

NOTE: International visual distress and urgency signals are contained in the CAA Flight Information Manual for sale by the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C.

60.24 See Amendment 60-5

VISUAL FLIGHT RULES (VFR)

§ 60.30 *Ceiling and distance from clouds.* Aircraft shall comply with the following requirements as to ceiling and distance from clouds:

(a) *Within control zones.* Unless authorized by air traffic control, aircraft shall not be flown:

(1) Less than 500 feet vertically under, 1,000 feet vertically over, and 2,000 feet horizontally from any cloud formation; or

B (2) Beneath the ceiling when it is less than 1,000 feet. B. See 60-7

C (b) *Elsewhere.* (1) when at an altitude of more than 700 feet above the surface, aircraft shall not be flown less than 500 feet vertically under, 1,000 feet vertically over, and 2,000 feet horizontally from any cloud formation;

(2) When at an altitude of 700 feet above the surface or less, aircraft shall not be flown unless clear of clouds.

§ 60.31 *Visibility*—(a) *Ground visibility within control zones.* When the ground visibility is less than 3 miles, no person shall take off or land an aircraft at an airport within a control zone, or enter the traffic pattern of such an airport, unless an air traffic clearance is obtained from air traffic control;

(b) *Flight visibility within control zones.* When the flight visibility is less than 3 miles, no person shall operate an aircraft in flight within a control zone, unless an air traffic clearance is obtained from air traffic control;

(c) *Flight visibility within control areas.* When the flight visibility is less than 3 miles, no person shall operate an aircraft within a control area;

NOTE: When the flight visibility is less than 3 miles, operations within control areas are to be conducted in accordance with instrument flight rules. Flight below 700 feet above the surface is not within a control area. See definition of control area.

D - See 60-7

E (d) *Flight visibility elsewhere.* When outside of control zones and control areas, no person shall operate an aircraft in flight when the flight visibility is less than one mile. However, helicopters may be flown at or below 700 feet above the surface when the flight visibility is less than one mile if operated at a reduced speed which will give the pilot of such helicopter adequate opportunity to see other air traffic or any obstruction in time to avoid hazard of collision.

NOTE: When traffic conditions permit, air traffic control will issue an air traffic clearance for flights within, entering, or departing control zones when ground visibility or the flight visibility is less than 3 miles. The operator of any airport within a control zone, other than the airport upon which the

control zone is centered, may secure continuing permission from air traffic control to conduct operations when the visibility is less than 3 miles: *Provided*, That such operations, at all times, remain 2,000 feet horizontally and 500 feet vertically from clouds, and traffic patterns are established and observed which avoid conflict with other operations. When outside of control zones and at an altitude of less than 700 feet above the surface, helicopters are permitted to fly when the flight visibility is less than one mile because of their special flight characteristics which allow them to proceed at low speed with safety.

§ 60.32 *Cruising altitudes.* When an aircraft is operated in level cruising flight at 3,000 feet or more above the surface, the following cruising altitudes shall be observed:

(a) *Within control zones and control areas.* At an odd or even thousand-foot altitude appropriate to the direction of flight as specified by the Administrator;

(b) *Elsewhere.* When the flight visibility is less than 3 miles, at an altitude appropriate to the magnetic course being flown as follows:

(1) 0° to 89° inclusive, at odd thousands (3,000; 5,000; etc.).

(2) 90° to 179° inclusive, at odd thousands plus 500 (3,500; 5,500; etc.).

(3) 180° to 269° inclusive, at even thousands (4,000; 6,000; etc.).

(4) 270° to 359° inclusive, at even thousands plus 500 (4,500; 6,500; etc.).

NOTE: "Odd and even" thousand-foot altitudes specified by the Administrator for civil airways will be published in the CAA Flight Information Manual, for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. In view of increasing air traffic and the broad range of speed of aircraft, safety requires observance of the above cruising altitudes.

§ 60.33 *VFR flight plan.* If a VFR flight plan is filed, it shall contain such of the information listed in § 60.41 as air traffic control may require.

NOTE: Although flight plans are not required for VFR flight, air traffic control will accept such flight plans when desired by the pilot. Flights proceeding over sparsely populated areas or mountainous terrain may thus take advantage of any search and rescue facilities which may be available in emergencies. The information contained in such a flight plan is of importance to search and rescue operations.

INSTRUMENT FLIGHT RULES (IFR)

§ 60.40 *Application.* When aircraft are not flown in accordance with the distance-from-cloud and visibility rules prescribed in the visual flight rules, §§ 60.30–60.33, aircraft shall be flown in accordance with the rules prescribed in §§ 60.41–60.49.

§ 60.41 *IFR flight plan.* Prior to take-off from a point within a control zone or prior to entering a control area or control zone, a flight plan shall be filed with air traffic control. Such flight plan shall contain the following information unless otherwise authorized by air traffic control:

(a) Aircraft identification, and if necessary, radio call sign;

(b) Type of aircraft; or, in the case of a formation flight, the types and number of aircraft involved;

(c) Full name, address, and number of pilot certificate of pilot in command of the aircraft, or of the flight commander if a formation flight is involved;

(d) Point of departure;

(e) Cruising altitude, or altitudes, and the route to be followed;

(f) Point of first intended landing;

(g) Proposed true air speed at cruising altitude;

(h) Radio transmitting and receiving frequencies to be used;

(i) Proposed time of departure;

(j) Estimated elapsed time until arrival over the point of first intended landing;

(k) Alternate airport or airports, in accordance with the requirements of § 60.42;

(l) Amount of fuel on board expressed in hours;

(m) Any other information which the pilot in command of the aircraft, or air traffic control, deems necessary for air traffic control purposes;

(n) For international flights: The number of persons on board.

§ 60.42 *Alternate airport.* An airport shall not be listed in the flight plan as an alternate airport unless current weather reports and forecasts show a trend indicating that the ceiling and visibility at such airport will be at or above the following minimums at the time of arrival:

(a) *Airport served by radio directional facility.* Ceiling 1,000 feet, visibility one mile; or ceiling 900 feet, visibility 1½ miles; or, ceiling 800 feet, visibility 2 miles;

(b) *Airport not served by radio directional facility.* Ceiling 1,000 feet with broken clouds or better, visibility 2 miles;

(c) *Minimums at individual airports.* The Administrator may, in the interest of safety, prescribe higher ceiling and visibility minimums at individual airports than required by paragraph (a) or (b) of this section; and for individual operations at particular airports, may specify lower minimums if he shall find that such reduced minimums will not decrease safety.

NOTE: The minimums set forth in § 60.42 are required for clearance prior to take-off and are not intended to limit use of any alternate airport if weather conditions change while en route, in which event the published landing minimums shall apply. Minimums for particular airports which may be prescribed by the Administrator will be published in Parts 609 and 610 of this title, and also may be found in the Approach and Landing Charts of the Coast and Geodetic Survey, and in the Airman's Guide.

§ 60.43 *Air traffic clearance.* Prior to take-off from a point within a control zone, or prior to entering a control area or control zone, an airtraffic clearance shall be obtained from air traffic control.

§ 60.44 *Cruising altitudes.* Aircraft shall be flown at the following cruising altitudes:

(a) *Within control areas and control zones.* At altitudes authorized by air traffic control;

(b) *Elsewhere.* At an altitude appropriate to the magnetic course being flown as follows:

(1) 0° to 89° inclusive, at odd thousands (1,000; 3,000; etc.).

(2) 90° to 179° inclusive, at odd thousands plus 500 (1,500; 3,500; etc.).

(3) 180° to 269° inclusive, at even thousands (2,000; 4,000; etc.).

(4) 270° to 359° inclusive, at even thousands plus 500 (2,500; 4,500; etc.).

NOTE: The above cruising altitudes are not in conflict with those required for flight under VFR rules.

§ 60.45 *Course to be flown on civil airways.* Aircraft operating along civil airways shall be flown as follows unless otherwise authorized by Air Traffic Control:

(a) Along a low/medium frequency airway, aircraft shall be flown to the right of the center line of such airway.

(b) Along a VOR airway, aircraft shall be flown on a radial designated as forming the center line of such airway.

§ 60.46 *Instrument approach procedure.* When instrument let-down to an airport is necessary, a standard instrument approach procedure prescribed for that airport by the Administrator shall be used, unless:

(a) A different instrument approach procedure specifically authorized by the Administrator is used, or

(b) A different instrument approach procedure is authorized by air traffic control for the particular approach, provided such authorization is issued in accordance with procedures approved by the Administrator.

NOTE: Standard instrument approach procedures prescribed by the Administrator are published in Parts 609 and 610 of this title, and also may be found in the Approach and Landing Charts and Radio Facility Charts of the Coast and Geodetic Survey, and in the Airman's Guide. Such procedures have been carefully investigated with respect to pattern and terrain clearance. Safety would not permit several aircraft to make simultaneous use of more than one instrument approach procedure unless such operations were controlled.

§ 60.47 *Radio communications.* ~~Within control zones and control areas~~ the pilot in command of the aircraft shall ensure that a continuous watch is maintained on the appropriate radio frequencies and shall report by radio as soon as possible the time and altitude of passing each designated reporting point, or the reporting points specified by air traffic control, together with weather conditions which have not been forecast, and other information pertinent to the safety of flight.

NOTE: Designated reporting points are noted in publications of aids to air navigation. Control of air traffic is predicated on knowledge of the position of aircraft in flight. The reporting of unanticipated weather encountered en route such as icing or extreme turbulence may be of importance to the safety of other aircraft anticipating flight within the area.

§ 60.49 *Radio failure.* If unable to maintain two-way radio communications, the pilot in command of the aircraft shall:

(a) If operating under VFR conditions, proceed under VFR and land as soon as practicable, or

(b) Proceed according to the latest air traffic clearance to the radio facility serving the airport of intended landing, maintaining the minimum safe altitude or the last acknowledged assigned altitude whichever is higher. Descent shall start at the expected approach time last authorized or, if not received and acknowledged, at the estimated time of arrival indicated by the elapsed time specified in the flight plan.

NOTE: Detailed procedures to be followed by the pilot are contained in the CAA Flight Information Manual, for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

DEFINITIONS

§ 60.60 *Definitions.* As used in this part, terms shall be defined as follows:

Acrobatic flight. Maneuvers intentionally performed by an aircraft involving an abrupt change in its altitude, an abnormal attitude, or an abnormal acceleration.

NOTE: The term "acrobatic flight" is not intended to include turns or maneuvers necessary to normal flight.

Air traffic. Aircraft in operation anywhere in the airspace and on that area of an airport normally used for the movement of aircraft.

Air traffic clearance. Authorization by air traffic control, for the purpose of preventing collision between known aircraft, for an aircraft to proceed under specified traffic conditions within ~~a control zone or control area~~ Controlled Airspace.

Air traffic control. A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

Aircraft. Any contrivance used or designed for navigation of or flight in the air, except a parachute or other contrivance designed for such navigation but used primarily as safety equipment.

Airplane. A mechanically propelled aircraft the support of which in flight is derived dynamically from the reaction on surfaces in a fixed position relative to the aircraft but in motion relative to the air.

Airport. A defined area on land or water, including any buildings and installations, normally used for the takeoff and landing of aircraft.

Airship. A mechanically propelled aircraft whose support is derived from lighter-than-air gas.

Alternate airport. An airport specified in the flight plan to which a flight may proceed when a landing at the point of first intended landing becomes inadvisable.

Balloon. An aircraft, excluding moored balloons, without mechanical means of propulsion, the support of which is derived from lighter-than-air gas. See 60-7

Ceiling. The height above the ground or water of the lowest layer of clouds or obscuring phenomena that is reported as "broken," "overcast," or "obscuration" and not classified as "thin" or "partial."

Control area. An airspace of defined dimensions, designated by the Administrator, extending upwards from an altitude of 700 feet above the surface, within which air traffic control is exercised.

See 60-7

Control zone. An airspace of defined dimensions, designated by the Administrator, extending upwards from the surface, to include one or more airports, and within which rules additional to those governing flight in control areas apply for the protection of air traffic.

Cruising altitude. A constant altimeter indication, in relation to sea level, maintained during a flight or portion thereof.

Expected approach time. The time at which it is expected that an arriving aircraft will be cleared to commence approach for a landing.

Flight plan. Specified information filed either verbally or in writing with air traffic control relative to the intended flight of an aircraft.

Flight visibility. The average horizontal distance that prominent objects may be seen from the cockpit.

Glider. An aircraft without mechanical means of propulsion, the support of which in flight is derived dynamically from the reaction on surfaces in motion relative to the air.

Ground visibility. The average range of vision in the vicinity of an airport as reported by the U. S. Weather Bureau or, if unavailable, by an accredited observer.

Helicopter. A type of rotorcraft the support of which in the air is normally derived from airfoils mechanically rotated about an approximately vertical axis.

IFR. The symbol used to designate instrument flight rules.

IFR conditions. Weather conditions below the minimum prescribed for flights under VFR.

Magnetic course. The true course or track, corrected for magnetic variation, between two points on the surface of the earth.

Prohibited area. Airspace identified by an area on the surface of the earth within which the flight of aircraft is prohibited. A prohibited area may be established by the President of the United States or any State of the United States pursuant to the Air Commerce Act of 1926, or it may be established pursuant to the Civil Aeronautics Act of 1938, as amended.

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

Restricted area. Airspace identified by an area on the surface of the earth within which the flight of aircraft, while not wholly prohibited, is subject to restrictions. A restricted area may be established by the President of the United States or by any State of the United States pursuant to the Air Commerce Act of 1926, or it may be established pursuant to the Civil Aeronautics Act of 1938, as amended, or it may be established by the Administrator of Civil Aeronautics pursuant to the provisions of § 60.13a.

Rotorcraft. An aircraft whose support in the air is chiefly derived from the vertical component of the force produced by rotating airfoils.

Sunset and sunrise. Sunset and sunrise are the mean solar times of sunset and sunrise as published in the Nautical Almanac converted to local standard time for the locality concerned, except within the Territory of Alaska.

NOTE: The Nautical Almanac containing sunshine tables may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Information is also available from the sunshine tables in the offices of the Civil Aeronautics Administration or the United States Weather Bureau.

Traffic pattern. The flow of aircraft operating on and in the vicinity of an airport during specified wind conditions as established by appropriate authority.

VFR. The symbol used to designate visual flight rules.

VFR conditions. Weather conditions equal to or above the minimum prescribed for flights under VFR.

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NOTICE

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