CIVIL AERONAUTICS BOARD

WASHINGTON, D. C.

CIVIL AIR REGULATIONS

PART 60—AIR TRAFFIC RULES

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CIVIL AIR REGULATIONS

PART 60—AIR TRAFFIC RULES

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60.0 Provision for issuance. Pursuant to the provisions of the Civil Aeronautics Act of 1938, as amended, empowering the Administrator of Civil Aeronautics to issue certificates for airmen, aircraft, air carriers, air navigation facilities and air agencies, and requiring the Board to prescribe air traffic rules governing the flight of, and for the navigation, protection, and identification of aircraft, including rules as to safe altitudes of flight and rules for the prevention of collisions between aircraft and between aircraft and land or water vehicles and prohibiting the operation or navigation of aircraft in violation thereof, the following air traffic rules relating thereto, in addition to those prescribed elsewhere in the Civil Air Regulations, are hereby prescribed.

60.1 Definitions.

60.100 (Unassigned.)

60.101 (Unassigned.)

60.102 (Unassigned.)

60.103 Control zone. A control zone is the airspace above that area on the surface of the earth within 3 miles of the center of an airport designated by the Administrator as a control airport, and within one-half mile of a line extending from the center of such airport to the radio range station established for the purpose of directing air traffic to such airport.

NOTE.—For a list of control airports, see *Air Navigation Radio Aids* published periodically by the Administrator.

60.104 Zone of intersection. A zone of intersection is that part of a civil airway which overlaps and lies within any part of any other civil airway.

60.105 Control zone of intersection. A control zone of intersection is the airspace above that area on the surface of the earth within a radius of 25 miles of a radio range station designated by the Administrator as the center of such intersection.

NOTE.—For a list of control zones of intersection, see *Air Navigation Radio Aids* published periodically by the Administrator.

60.106 (Unassigned.)

60.107 Green zone of intersection. A green zone of intersection is a zone of intersection of a green civil airway in which through traffic on a green civil airway continues through such zone at a constant altitude, and in which zone traffic on the intersected amber, red, or blue civil airway shall proceed as outlined in §§ 60.58410, 60.58420, and 60.5843.

60.108 Amber zone of intersection. An amber zone of intersection is a zone of intersection on an amber civil airway in which through traffic on an amber civil airway continues through such zone at a constant altitude and in which zone traffic on the intersected red or blue civil airway shall proceed as outlined in §§ 60.58420 and 60.5843.

60.109 Red zone of intersection. A red zone of intersection is a zone of intersection on a red civil airway in which traffic on a red civil airway continues through such zone at a constant altitude and traffic on a blue civil airway shall proceed as outlined in § 60.5843.

60.110 Zone of intersection priority. That part of an amber, red, or blue zone of intersection which may overlap and lie within a green zone of intersection shall be considered as the green zone of intersection, and that part of a red or blue zone of intersection which may overlap or lie within an amber zone of intersection shall be considered as the amber zone of intersection, and that part of a blue civil airway which may overlap or lie within a red zone of intersection shall be considered as the red zone of intersection.

60.111 Alternate airport. An alternate airport is an airport, other than the point of first intended landing, specified in the flight plan, and to which the flight may be directed in case of emergency.

60.112 Radio fix. A radio fix is a geographical location designated by the Administrator on a civil airway above which the position of an aircraft in flight can be accurately determined by means of radio only (such as a cone of silence marker, Z type marker, fan type marker, or intersection of radio range on-course signals).

NOTE.—For a list of designated radio fixes, see *Air Navigation Radio Aids* published periodically by the Administrator.

60.113 Check point. A check point is a geographical location on the surface of the land or water, above which the position of an aircraft in flight can be accurately determined by means of visual reference. (Such as a river, highway, mountain, bridge, lightship, etc.)

60.114 Radio range station. A radio range station is that point in a radio station from which radio signals are emitted for the purpose of assisting an aircraft to maintain a course.

60.115 Range approach channel. A range approach channel is the air space above the ground or water below 17,000 feet above sea level located within 2 miles of either side of the center of the on-course signal of any leg or legs designated by the Administrator of a radio range station serving a control airport, and extending along such leg or legs from such radio range station for a distance of 15 miles: *Provided,* That such range approach channels may be modified or extended by the Administrator when he deems it necessary in the interests of safety.

60.116 (Unassigned.)

60.117 (Unassigned.)

60.118 (Unassigned.)

60.119 (Unassigned.)

60.120 Airway traffic control center. An airway traffic control center is a station operated by the Administrator for the purpose of controlling air traffic on civil airways.

NOTE.—For a list of airway traffic control centers, see *Air Navigation Radio Aids* published periodically by the Administrator.

60.121 Airway traffic control area. An airway traffic control area is an area within the limits of an airway designated by the Administrator and over which an airway traffic control center exercises control of air traffic.

NOTE.—For a list of airway traffic control areas, see *Air Navigation Radio Aids* published periodically by the Administrator.

60.122 Airway communications station. An airway communications station is an airway radio, teletype, or other communications station operated by the Administrator.

60.123 Airport control tower. An airport control tower is an establishment properly situated and equipped to allow an operator thereof to adequately control air traffic in the immediate vicinity of the airport on or adjacent to which such airport control tower is located.

60.124 (Unassigned.)

60.125 (Unassigned.)

60.126 (Unassigned.)

60.127 (Unassigned.)

60.128 (Unassigned.)

60.129 (Unassigned.)

60.130 Contact flight. Contact flight is flight of aircraft in which the attitude of the aircraft and its flight path can at all times be controlled by means of visual reference to the ground or water.

60.131 Instrument flight. Instrument flight is flight of aircraft in which the visual reference in § 60.130 is not continuously available and the attitude of the aircraft and its flight path can be controlled in part or in whole by reference to instruments only.

60.132 Over-the-top flight. Over-the-top flight is flight of aircraft made above an overcast, usually a cloud formation.

60.133 Flight plan. A flight plan means a plan of flight which shall contain the following information:

(*a*) The aircraft identification mark, or the name of the governmental service in which the aircraft is employed, if so employed, or the name of the air carrier operator and the trip number, if engaged in scheduled air transportation service.

(*b*) The type of aircraft involved and the number of aircraft making the flight, if the aircraft are in formation.

(*c*) The name of the pilot, or of the flight commander if the aircraft are in formation.

(*d*) The point of departure of the particular flight for which such plan is being filed.

(*e*) The proposed cruising altitude or altitudes.

(*f*) The point of first intended landing.

(*g*) The proposed cruising airspeed.

(*h*) The radio equipment carried in the aircraft. (If no radio—NORDO; if radio receiver only—RONLY; if two-way radio, statement of transmitter frequency to be used.)

(*i*) The proposed time of departure. (The time of departure shall be considered as the time when the aircraft leaves the ground.)

(*j*) The estimated elapsed time until arrival on the ground at the point of first intended landing. (For scheduled operation, the first stop to be made, together with additional stops if requested by an airway traffic control center.)

(*k*) The alternate airport, if the flight is to involve instrument flight.

(*l*) The route, if other than a direct course, and any other pertinent information which the pilot deems useful for control purposes or which may be requested by an airway traffic control center.

60.134 Approved flight plan. An approved flight plan is a plan of flight, containing the information required by § 60.133, which has been approved solely with respect to known air traffic conditions by the airway traffic control center of the Administrator into the control area of which the flight will first enter.

NOTE.—Approval of a flight plan is an authorization for an aircraft to proceed in accordance with the provisions of such flight plan only insofar as known air traffic conditions are concerned and does *not* constitute authority to violate any provision or provisions of the Civil Air Regulations.

60.1340 Traffic control instructions issued to the pilot before departure or en route shall be considered to be a part of the approved flight plan.

60.135 Cruising altitude. A cruising altitude is a flight altitude, measured in feet above sea level, proposed for that part of a flight from point to point during which a constant altitude will be maintained.

60.136 (Unassigned.)

60.137 (Unassigned.)

60.138 (Unassigned.)

60.139 (Unassigned.)

60.140 Ceiling. Ceiling is the distance from the cloud base to the ground. (The reports of the U. S. Weather Bureau, when available to the pilot, shall govern.)

60.141 Unlimited ceiling. A ceiling is considered unlimited when clouds cover less than one-half of the sky or when the base of the clouds is more than 9,750 feet above the point of observation. (The reports of the U. S. Weather Bureau, when available to the pilot, shall govern.)

60.142 Daylight, hours of. (Day flight, daylight hours, day.) The hours of daylight as used in these rules are those hours between the mean solar times of sunrise and sunset, as published in the Nautical Almanac, converted to local standard time for the locality concerned.

NOTE.—The Nautical Almanac, price 50 cents, containing sunshine tables, may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. Information is available from the Sunshine Tables, in the offices of Officials in Charge, Airport Station, U. S. Weather Bureau, at:

Newark, N. J.
Washington Airport, Washington, D. C.
Atlanta, Ga.
Cleveland, Ohio.
Chicago, Ill.
Kansas City, Mo.
Fort Worth, Tex.
Salt Lake City, Utah.
Portland, Oreg.
Oakland, Calif.

These Sunshine Tables are not available for distribution.

60.143 Darkness, hours of. (Night flight, hours of darkness, night.) The hours of darkness as used in these rules are those hours between the mean solar times of sunset and sunrise, as published in the Nautical Almanac, converted to local standard time for the locality concerned.

NOTE.—See note under § 60.142.

60.144 Visibility. Visibility is the greatest distance toward the horizon at which conspicuous objects can be seen and identified.

60.145 Weather minimums. Weather minimums are ceiling, visibility, and other minimums provided for specified types of flight operation, and below which flight operation is not permitted, unless specifically authorized elsewhere in these regulations or by the Administrator.

NOTE.—The local United States Weather Bureau reporting station for each control airport will classify existing weather conditions for such airport by one of the following symbols:

Class C—*Contact:* Weather equal to or better than the minimums specified for the particular airport for flight in accordance with contact flight rules. (Satisfactory for contact flight.)

Class N—*Instrument:* Weather less than the minimums specified for the particular airport for contact flight (Class C above) and down to the minimums prescribed for the particular airport for suspension of flight operations. (Requiring observance of instrument flight rules, unless flight in accordance with contact flight rules has been authorized as provided for in §§ 60.440 and 60.441.)

Class X—*Closed:* Weather below the minimums specified for the particular airport, wherein any landing or take-off, other than a flight of public aircraft or scheduled air-carrier aircraft if otherwise authorized, is suspended. (Take-off and landing of non-scheduled civil aircraft suspended, unless authorized as provided for in § 60.540.)

60.146 (Unassigned.)

60.147 (Unassigned.)

60.148 (Unassigned.)

60.149 (Unassigned.)

60.150 Military aircraft. Military aircraft are public aircraft operated in the service of the United States Army, National Guard, Navy, Marine Corps, or Coast Guard.

60.151 Public aircraft. A public aircraft is an aircraft used exclusively in the governmental service.

60.152 Acrobatics (acrobatic flight). Acrobatics are unnecessary flight evolutions voluntarily performed with an aircraft requiring or resulting in an abrupt change in its attitude, an abnormal attitude, or operations in excess of the aircraft's design level flight speed (placard value). A normal bank not in excess of 70 degrees will not be considered as an abrupt change in the aircraft's attitude or as an abnormal attitude.

60.2 Control airport and other designations.

60.20 (Unassigned.)

60.21 Control airports. The Administrator, in the interest of safety, and after finding it necessary for the proper control of air traffic may designate as a control airport any airport in the United States.

60.22 Control zones of intersection. The Administrator, in the interest of safety, and after finding it necessary for the proper control of air traffic, may designate any radio range station located within the limits of a civil airway as the center of a control zone of intersection.

60.23 Airway traffic control area. The Administrator, in the interest of safety, may designate such portions of the civil airways as airway traffic control areas as may be necessary for the proper control of air traffic.

60.3 Flight rules (general).

60.30 Pilot certificates. No person shall pilot a civil aircraft in the United States unless such person holds a valid pilot certificate, or in violation of any term, condition, or limitation of such certificate: *Provided,* That an alien may pilot a civil aircraft in the United States in accordance with a pilot certificate issued or validated pursuant to a reciprocal arrangement entered into between the United States and the foreign government from which such alien holds a valid pilot certificate.

60.31 Aircraft certificate. No flight of civil aircraft, other than of a foreign aircraft whose navigation in the United States has been authorized according to law, shall be made or authorized to be made in the United States unless there is outstanding for such aircraft a valid aircraft airworthiness certificate, or in violation of any term, condition, or limitation of such certificate.

60.32 Identification mark. No aircraft (except a foreign aircraft provided for in section 6 of the Air Commerce Act of 1926, as amended) shall be operated within the United States unless it displays an identification mark assigned thereto by the Administrator: *Provided,* That aircraft of the national defense forces of the United States shall be identified by the agency having jurisdiction over such aircraft, in a manner satisfactory to the Board. The identification marks assigned by the Administrator shall be as follows:

(*a*) A certificated aircraft which has fully complied with the minimum airworthiness requirements specified in the Civil Air Regulations, shall display the Roman capital letters NC followed by the registration number.

(*b*) A certificated aircraft which has not demonstrated compliance with the airworthiness requirements specified in the Civil Air Regulations but which, in the opinion of the Administrator, is in condition for safe operation for particular activities, shall display the Roman capital letters NR followed by the registration number.

(*c*) A certificated aircraft which has not demonstrated compliance with the airworthiness requirements specified in the Civil Air Regulations but which, in the opinion of the Administrator, is in condition for safe operation for experimental purposes shall display the Roman capital letters NX followed by the registration number.

(*d*) An uncertificated aircraft shall display the registration number only.

(*e*) A certificated aircraft manufactured in the United States for delivery to a foreign purchaser may display such marks or insignia as the appropriate foreign government shall designate. Such aircraft may only be operated for the purpose of test flights and demonstration for a limited time in the immediate vicinity of the manufacturer's airport or for the sole purpose of delivery to a foreign purchaser.

60.320 Location for display. The identification mark on conventional aircraft shall be displayed, in the case of a biplane, on the lower surface of the lower left wing and on the upper surface of the upper right wing and, in the case of a monoplane, on the lower surface of the left wing and the upper surface of the right wing: *Provided,* That if the length of the lower left wing of a biplane is less than one-half the length of the upper left wing, the identification mark shall be displayed on the lower surface of the upper left wing as far to the left as possible. The top of the letters and figures shall be toward the leading edge. The height shall be at least four-fifths of the mean chord but need not exceed 30 inches. The mark shall also be located on both sides of the vertical tail surface of all conventional airplanes, of a size as large as a 2-inch margin will permit. On gliders the letters and figures shall be displayed in the same manner and place prescribed for conventional airplanes except the minimum height shall be 15 inches. On aircraft other than conventional airplanes or gliders or on conventional aircraft where the design or dimensions of the wing prevent the display of the identification mark in the manner prescribed in these regulations, the identification mark shall be displayed in a manner satisfactory to the Administrator.

60.321 Lettering. The width of the letters and figures (except the figure 1) shall be at least two-thirds of their height. The width of each stroke shall be at least one-sixth of the height of the letters and figures, which shall be of uniform size. The space between such letters and figures shall be not less than one-sixth of the height. Such letters and figures shall be painted on the aircraft in a solid color and on a clearly contrasting background. Such identification mark shall be kept clean and clearly visible. No other design, mark, or symbol which might modify or confuse the assigned mark shall be placed on the aircraft except with the approval of a duly authorized inspector of the Administrator.

60.322 Pilot identification card. No pilot shall pilot civil aircraft in flight after January 8, 1942, except scheduled air carrier aircraft, unless he has in his possession, in addition to a currently effective pilot certificate, an identification card, satisfactory to the Administrator, containing his fingerprints, his picture, and his signature.

60.33 Take-off and landing.

60.330 Procedure for taking off and landing.

60.3300 A take-off shall not be commenced until there is no risk of collision with other aircraft during such take-off.

60.3301 Aircraft approaching for a landing shall circle the airport or other landing area sufficiently to observe other traffic, unless the pilot receives other instructions from the air-traffic control-tower operator. All circles, either approaching for a landing or after take-off, shall be made to the left unless the pilot receives other instructions from the air-traffic control-tower operator, or unless the Board has prescribed, in the interests of safety, a different procedure for the particular airport or landing area.

60.3302 Aircraft approaching for a landing shall, unless impracticable, maintain a straight approach course for the last 1,000 feet before crossing the airport boundary.

60.3303 (Unassigned.)

60.3304 Air traffic departing from or arriving at a control airport shall take precedence over other air traffic within the control zone of such airport when required in the interests of safety.

60.331 Running motors, supervision of. No aircraft engine shall be started or run unless a competent operator is in the aircraft attending the engine controls. Blocks, equipped with ropes or other suitable means of pulling them, shall always be placed in front of the wheels before starting the engine, or engines, unless the aircraft is provided with adequate parking brakes and the same are fully on.

60.332 Air meet landing. In approaching a landing area where there is a congestion of aircraft or an assembly of persons or automobiles in the vicinity of aircraft, pilots shall proceed with caution and ascertain before landing, or before flying at low altitude over the landing area, whether or not an air meet or aeronautical demonstration is in progress. (See § 60.8911.)

60.34 Flight en route.

60.340 Right-of-way. The following rules will govern aircraft right-of-way.

60.3400(*a*) **Order.** Aircraft in flight shall have right-of-way in the following order (1) Balloons, fixed or free (an airship not under control is classed as a free balloon), (2) gliders, (3) airships, and (4) airplanes, including rotor planes.

60.3401(*b*) **Crossing.** When two aircraft are on crossing courses at approximately the same altitude, the aircraft which has the other on its left shall have right-of-way, and the other aircraft shall give way.

60.3402(*c*) **Approaching head-on.** When two aircraft are approaching head-on, or approximately so, and there is danger of collision, each shall alter its course to the right so that they will pass each other at a distance of at least 500 feet.

60.3403(*d*) **Overtaking.** An overtaken aircraft shall have right-of-way and the overtaking aircraft shall keep clear of the overtaken aircraft by altering its own course to the right.

60.3404(*e*) **Landing.** An aircraft landing in the manner prescribed in § 60.3302 shall have right-of-way over other aircraft in flight or on the ground or water, except aircraft landing in distress.

60.3405(*f*) **Distress landing.** An aircraft in distress shall have right-of-way in attempting to land.

60.341 Duty to give way. When landing or maneuvering in preparation to land, it shall be the duty of the aircraft at the higher altitude to avoid the aircraft at the lower altitude.

60.342 Right side traffic. Aircraft operating along a civil airway shall keep to the right of the radio range course projected along the airway, or if no radio range course is projected along the airway, shall keep to the right of the center line of the airway except:

(*a*) When impracticable for reasons of safety;

(*b*) When otherwise instructed or authorized by an airway traffic control center of the Administrator;

(*c*) In the case of inbound aircraft operating on instruments and using the on-course signal of the radio range;

(*d*) When landing or taking off.

60.343 Proximity in flight. No aircraft, other than military aircraft of the United States engaged in military maneuvers, shall be flown closer than 500 feet to any other aircraft in flight, except that by prearrangement two or more civil aircraft may be flown in formation closer than 500 feet to each other.

60.344 Airport traffic pattern. Aircraft in contact flight within three miles horizontally of the center of an airport or other landing area shall conform to the circle rule provided in §60.3301 unless flying at an altitude in excess of 1,500 feet above such airport or other landing area.

60.345 Liquor, narcotics, and drugs. No pilot or other member of the crew of an aircraft in flight shall be under the influence of, or use intoxicating liquor, cocaine, or other habit-forming drugs, nor shall such person carry any other person who is obviously under the influence of intoxicating liquor, cocaine, or other habit-forming drugs, except a medical patient under proper care, or in case of emergency.

60.346 Towing by aircraft. The towing of aircraft by other aircraft or the towing of any device or object by aircraft is prohibited, unless permission therefor has been granted by the Administrator in accordance with the provisions of § 60.91: *Provided, however,* Such restriction shall not apply to military aircraft previously authorized by the appropriate governmental agency to make such flights in the public interest.

60.347 Dropping objects or things. No object or thing, other than fine sand, fine (No. 7 or smaller) lead shot, fuel, or water (all unconfined), shall be dropped or released from an aircraft in flight by any person on board the aircraft, unless permission therefor has been granted by the Administrator in accordance with the provisions of § 60.91: *Provided, however,* Such restriction shall not apply to military aircraft previously authorized by the appropriate governmental agency to make such flights in the public interest. The pilot or person in charge of the aircraft shall be responsible for the observance of this rule by all persons in the aircraft.

60.348 Airspace reservations. No flight of aircraft shall be made within any airspace reservation set aside by order of the President of the United States.

NOTE.—Areas which the Administrator believes to be hazardous to aircraft, by reason of the activities carried on in such areas, may be indicated on the aeronautical charts as "Danger Areas" and published in *Notices to Airmen.* Such areas will include congested flight training areas, anti-aircraft firing and training areas, field artillery firing and training areas, coast artillery firing and training areas, barrage balloon training areas, aerial gunnery firing ranges, proving grounds, and any other area in which activities are conducted which would constitute a serious hazard to aircraft in flight. Pilots are warned of the extreme danger to themselves, their passengers and their aircraft should they enter such an area without first ascertaining that the activities which make the area hazardous are not to be carried on at the time of the flight.

60.349 Passenger baggage restrictions. A pilot shall not pilot any aircraft (except scheduled air-carrier aircraft) in flight carrying passenger's baggage or cargo unless every item of such baggage or cargo has been thoroughly searched by the pilot, or a person designated by him, immediately prior to taking off for the flight and placed in the aircraft by the pilot or a person designated by him, with no possession by any other person intervening between such search and the placing of the baggage or cargo in the aircraft. If such baggage or cargo includes a camera, such camera shall be placed in a closed compartment or space in the aircraft completely inaccessible to all passengers during the flight. Any pilot shall permit the search of his aircraft upon demand by any representative of the Army, Navy, Civil Aeronautics Administration, Civil Aeronautics Board, or by civil police.

60.35 Minimum and maximum safe altitudes of flight.

60.350 Minimum safe altitudes. Exclusive of taking off from or landing upon an airport or other landing area aircraft shall not be flown below the following minimum safe altitudes of flight:

60.3500 An altitude over the congested parts of cities, towns, or settlements, sufficient to permit at all times an emergency landing outside of such areas in the event of complete power failure, but in no case less than 1,000 feet above the ground.

60.3501 (Unassigned.)

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60.3502 1,000 feet above the ground over any Federal penal institution or any open-air assembly of persons.

60.3503 500 feet above the ground or water elsewhere than as specified in §§ 60.3500, and 60.3502, or within 500 feet from any mountain, hill, or other obstruction to flight, except as may be specifically approved by the Administrator: *Provided, however*, That seaplanes and amphibians may be flown below 500 feet, but not below 300 feet, if making a contact flight during daylight hours over open water and where an emergency landing may, at all times, be made, without the aid of power, into the wind and without danger of collision with craft on the surface or other obstructions: *And provided, further*, That the restrictions of this paragraph shall not apply to public aircraft, previously authorized by the appropriate governmental agency, to make specific flights below such minimums in the public interest.

60.3504 1,000 feet above the ground or water, or within 1,000 feet of any mountain, hill or other obstruction to flight, if an aircraft is making an instrument flight as defined in § 60.131.

60.3505 Any maneuver required in student instruction or solo practice under the supervision of a certificated flight instructor, the Army, Navy, Marine Corps, or Coast Guard, or in flight tests given by an inspector of the Administrator, may be conducted at the altitude above the ground or water necessary for the proper execution of such maneuver in places other than as specified in §§ 60.3500 and 60.3502.

60.351 Maximum safe altitude. Aircraft, except military aircraft, shall not be flown at altitudes above 17,000 feet above sea level: *Provided, however*, That air carrier aircraft in scheduled air transportation may operate above that altitude when authorized by the terms of the air-carrier operating certificate issued to the air carrier: *And provided, further*, That the Administrator may authorize flights of aircraft above that altitude when necessary in the interests of safety or the development of aeronautics.

60.3510 Military aircraft when operating above 17,000 feet above sea level must be equipped with two-way radio equipment adequate to communicate at all times with either a ground radio station maintained by one of the armed forces of the United States or with an airway communications station of the Administrator. Such aircraft shall obtain a clearance from the appropriate airway traffic control center of the Administrator before ascending to or descending from that altitude if during such ascent or descent the aircraft enters into or passes through an airway traffic control area.

60.3511 Military aircraft while operating either contact or on instruments above the altitude of 17,000 feet above sea level in accordance with the provisions of § 60.351 shall be exempt from all other provisions of this Part except that such aircraft shall comply with the airplane light rules of § 60.61 and when flying along or crossing routes or civil airways approved for use by a scheduled air carrier authorized to operate above 17,000 feet, such military aircraft shall comply with the following flight altitudes:

(*a*) *Eastbound flight.* Aircraft making good a true course of 0° (or 360°) to, but not including, 180° shall fly at an ODD thousand-foot level plus 500 feet, above sea level (such as 17,500, 19,500 or 21,500 feet); and

(*b*) *Westbound flights.* Aircraft making good a true course of 180° to but not including, 360° (or 0°) shall fly at an EVEN thousand-foot level plus 500 feet, above sea level (such as 18,500, 20,500 or 22,500 feet).

60.36 Parachutes. No parachute shall be carried in a civil air craft of the United States in a manner available for emergency use unless within the preceding 60 days it has been packed by a person certificated for that purpose in accordance with the Civil Air Regulations or by personnel of the Army, Navy, Marine Corps or Coast Guard whose regular duty is to pack parachutes for use in such services.

60.37 Landing flares. No aircraft shall be flown for hire at night beyond an area within a circle with a radius of 3 miles drawn from the center of the airport of take-off unless equipped with certificated landing flares as required in § 04.512 (*c*).

60.38 Air traffic control procedures and phraseologies. Airmen shall observe air traffic control procedures and phraseologies which shall provide adequately for safety in the operation of aircraft in air commerce and which are best adapted to ready understanding by the flying public.

60.39 Flight in range approach channel. Unless on an approved flight plan, no person shall fly an aircraft within the limits of a range approach channel above 1,500 feet over the

surface of the earth except to enter such channel on the right side as determined by the proposed direction of flight along such channel and then to continue along the right side of such channel in normal cruising flight. No person shall fly an aircraft below 1,500 feet above the surface of the earth in such channel except to cross such channel at an angle of not less than 45° in normal cruising attitude: *Provided*, That a pilot taking off from or landing at a designated landing area located within a range approach channel may perform such maneuvers below 1,500 feet as are necessary to effect a normal take-off therefrom or a normal approach and landing thereon, as the case may be.

60.391 Flight within local flying areas adjacent to a control airport. The Administrator may designate flight zones for specific purposes within the local flying area, as defined in § 60.95, adjacent to any control airport. Thereafter, within such local flying area, no person shall make a flight of a type for which a zone has been set apart, except within such zone.

60.4 Flight rules (contact). In addition to general or special air traffic rules which apply, the following rules shall govern a contact flight in weather conditions equal to or better than those described in § 60.44, within the limits of a civil airway or control zone of intersection, or elsewhere in interstate, overseas, or foreign air commerce. For flight in weather conditions worse than those described in § 60.44 and for flight in closer proximity to cloud formations than the distances prescribed in § 60.44, see § 60.5.

NOTE.—The rules prescribed under § 60.4 will apply to scheduled air-carrier operations unless otherwise specifically indicated.

60.40 Pilot. No instrument rating required. (See Parts 40 and 61 for provisions applicable to scheduled air carriers.)

60.41 Equipment. Aircraft shall be certificated as to equipment as provided for in §§ 04.510, 04.511, 04.512, or 04.515, depending upon whether the flight is visual contact day within 100 miles of a fixed base, visual contact day unlimited distance or visual-contact night for landplanes, or either of the same for seaplanes or amphibians. (See §§ 04.530 and 04.531 for provisions applicable to scheduled air carriers.)

60.42 Fuel requirements. No aircraft shall take off without sufficient fuel and oil, taking into account wind and other weather conditions to be encountered during the course of the flight, to arrive at its point of first intended landing and effect a safe landing thereat. (See § 61.7020 for provisions applicable to scheduled air carriers.)

60.43 Flight plan. A flight plan is not required unless the flight is made above 3,500 feet above the ground or water within the limits of a civil airway as specified in § 60.471.

60.430 Notification of arrival. If the pilot of an aircraft has submitted, or authorized the submission of, a flight plan for transmission to destination, he shall, immediately upon landing or upon completion of the flight, file an arrival message for transmission to the point of departure.

60.44 Weather minimums. The following weather minimums shall govern flight made in accordance with contact flight rules: *Provided, however*, That an airway traffic control center of the Administrator may for reasons of safety restrict or suspend contact flight operation within the airway traffic control area of such center: *Provided, further*, That in the interests of safety the Administrator may require higher minimums at any particular control airport, and that such minimums shall govern the control zone in which such control airport lies.

60.440 Within control zones. Aircraft shall not be flown within a control zone unless the ceiling is at least 1,000 feet and the visibility is at least 3 miles: *Provided, however*, That a certificated air-traffic control-tower operator on duty in a radio-equipped airport control tower may authorize flight at altitudes of 1,000 feet or less above the ground or water when the visibility is less than 3 miles but not less than 1 mile: *And provided, further*, That such operator may suspend contact flight operation within the control zone when reasons of safety require such actions.

60.441 Outside of control zone.

60.4410 At or below 1,000 feet. Aircraft shall not be flown at or below 1,000 feet above the ground or water unless the ceiling is sufficient to permit flight at the minimum altitude prescribed in § 60.35 and unless the visibility during the hours of daylight is at least 1 mile and during the hours of darkness is at least 2 miles.

60.4411 Above 1,000 feet. Aircraft shall not be flown above 1,000 feet above the ground or water unless the ceiling is sufficient to permit flight at the minimum altitude prescribed in § 60.35 and unless the visibility is at least 3 miles at flight altitude.

60.442 Proximity to cloud formation. Aircraft shall not be flown closer than 500 feet vertically to an overcast or cloud formation nor closer than 2,000 feet horizontally to a cloud formation.

60.45 Alternate airport. No requirement.

60.46 Over-the-top flight. No flight of aircraft shall be made over broken clouds or stretches of solid overcast unless the attitude of the aircraft and its flight path can at all times be controlled by visual reference to the ground or water and ascent and descent can be made in accordance with the provisions of § 60.442. (For scheduled air carrier operations, see Parts 40 and 61.)

60.47 Flight en route.

60.470 Weather changes. If weather conditions below the minimums prescribed in § 60.44 are anticipated or are actually encountered en route, a landing shall be made at the nearest airport at which weather conditions are equal to or better than those prescribed in § 60.44, or the flight shall be altered so that it may be made in weather conditions as good as, or better than, such minimums, unless such flight can and does proceed in accordance with the instrument flight rules prescribed in § 60.5.

60.471 Contact flight above 3,500 feet on civil airway. In addition to all contact flight rules, aircraft flying under contact conditions at an altitude of more than 3,500 feet above the ground or water and within the limits of a civil airway shall conform to the rules prescribed for flight under instrument conditions in the following respects:

(1) Compliance with § 60.53, Flight plan, when flights touch airways traffic control areas;
(2) Maintenance of flight altitudes (§ 60.58); and
(3) Maintenance of communication contacts (§ 60.571).
(4) No change in an approved flight plan shall be made without the prior approval of the airway traffic control center concerned unless an emergency situation arises which requires immediate decision and action or unless weather conditions make it necessary for the pilot to effect such change in order to continue flight in accordance with contact flight rules; in either case the proper airway traffic control center shall be notified as soon as possible.

60.4710 Equipment. In addition to the equipment required by § 60.41 all such aircraft shall be equipped with a radio receiver as specified in § 04.512(e), a radio transmitter capable of maintaining communication with an airway communications station of the Administrator under normal conditions, and a sensitive altimeter as specified in § 04.513(d).

60.4711 Communication failure. In the event of the failure of two-way communication equipment on such aircraft the pilot shall immediately either leave the airway or descend to an altitude below 3,500 feet above the ground or water.

60.5 Flight rules (instrument). In addition to general or special air traffic rules which apply, the following rules shall govern instrument flight, flight in closer proximity to cloud formation than the distances prescribed in § 60.44, and flight in weather conditions worse than those described in § 60.44, within or approaching the limits of a civil airway or control zone of intersection, or elsewhere in interstate, overseas, or foreign air commerce.

NOTE.—The rules prescribed under § 60.5 will apply to scheduled air-carrier operations unless otherwise specifically indicated.

60.50 Pilot. No flight shall be made in civil aircraft unless the pilot in charge—

(*a*) holds a valid instrument rating; or
(*b*) holds a valid airline transport pilot certificate; or
(*c*) holds a valid commercial lighter-than-air pilot certificate; or
(*d*) is an active member of the Regular Army, Navy, Marine Corps, or Coast Guard, or a reserve member of any such service on extended active duty for at least 1 year, and who holds at least a private pilot certificate issued by the Administrator and a military instrument flying rating, or equivalent, issued by his service.

60.51 Equipment. Aircraft shall be properly certificated as to equipment according to the provisions of §§ 04.513, 04.514, and 04.515. (Scheduled air-carrier aircraft shall be certificated as provided in §§ 04.532, 04.533, and 04.534.)

60.52 Fuel requirements. No aircraft shall take off without fuel and oil sufficient, considering the wind and other weather conditions forecast for the flight, at least

(*a*) to complete such flight to the point of the first intended landing, and thereafter
(*b*) to fly to and land at the alternate airport designated in the approved flight plan, and thereafter
(*c*) to fly, at normal cruising consumption, for a period of 45 minutes.
(For scheduled air-carrier operations, see § 61.7021.)

60.53 Flight plan. Prior to take-off from any point within an airway traffic control area and prior to entering such an area, an approved flight plan as prescribed in § 60.134 is required. No flight plan shall be submitted until after the pilot has made a careful study of available current weather reports and forecasts and believes the flight can be made with safety.

NOTE.—For a list of airway traffic control areas, see *Air Navigation Radio Aids* published periodically by the Administrator.

60.530 Traffic control instructions. Traffic control instructions from an airway traffic control center of the Administrator issued to the pilot before departure or en route are a part of the approved flight plan, and the pilot shall comply with the same in all respects.

60.531 Control zone of intersection. No control zone of intersection served by a radio voice communication station of the Administrator shall be entered without first establishing communication with such station, directly or through other communication channels, and forwarding the expected time of arrival over the center of such zone, the altitude to be flown through such zone, and the course or courses to be followed while within such zone, and thereafter observing such traffic instructions as may be issued by such station: *Provided*, That such procedure shall not be required within an airway traffic control area if the flight plan has been approved by an airway traffic control center of the Administrator prior to entering such zone.

NOTE.—For a list of control zones of intersection, see *Air Navigation Radio Aids* published periodically by the Administrator.

60.532 Notification of arrival. If the pilot of an aircraft has submitted, or authorized the submission of, a flight plan for transmission to destination as provided for in § 60.53, he shall, immediately upon landing or upon completion of the flight, file an arrival message for transmission to the point of departure.

60.54 Weather minimums. The following weather minimums shall govern landings and take-offs made in accordance with instrument flight rules: *Provided, however*, That, in the interest of safety, the Administrator may require higher minimums at any airport: *And provided further*, That such minimums, if for a control airport, shall govern the control zone in which such airport lies.

60.540 Airports within control zones. No flight, other than by a public aircraft or by a scheduled air-carrier aircraft from or to a regular terminal or scheduled intermediate stop on the regular route, shall be made to or from a control airport nor to or from any other airport within a control zone, when the ceiling is less than 500 feet or the visibility is less than 1 mile: *Provided, however*, That if the control airport is equipped with a radio directional aid to air navigation designed to direct aircraft to that airport by the aid of instruments, a certificated air-traffic control-tower operator on duty in a radio-equipped airport control tower in operation at such airport may authorize departure from such control airport when the ceiling is not less than 300 feet and the visibility is not less than one-half mile. (For scheduled air carrier operation at terminals and scheduled intermediate stops, see §§ 40.290, 40.390, 61.7109, and 61.730.)

60.541 Airports outside a control zone. No flight, other than by a public aircraft or by a scheduled air carrier aircraft, shall be made to or from an airport outside of a control zone when the ceiling is less than 500 feet or the visibility is less than 1 mile. (For scheduled air carrier operation, see §§ 40.290, 40.390, 61.7109, and 61.730.)

60.55 Alternate airport. No take-off of aircraft shall be made unless:

(*a*) the flight plan as submitted includes an alternate airport having a landing area suitable for the equipment to be used, and

(*b*) weather reports and forecasts indicate that the weather conditions at the alternate airport will remain at or above the minimums specified in (*c*) or (*d*) below until the arrival of the aircraft thereat, and

(*c*) if the alternate airport is equipped with a radio directional aid to air navigation in operation and there is at such alternate airport a ceiling of at least 2,000 feet and a visibility of at least 3 miles if an overcast exists, or a ceiling of at least 1,500 feet and a visibility of at least 3 miles if broken clouds exist, or

(*d*) if the alternate airport is not equipped with a radio directional aid to air navigation, there is at such alternate airport an unlimited ceiling and a visibility of at least 3 miles. (For scheduled air carrier operation see §§ 61.23 and 61.7109.)

60.56 Over-the-top flight. Over-the-top flight shall be governed by instrument flight rules whenever the attitude of the aircraft and its flight path cannot be controlled at all times by visual reference to the ground or water.

60.57 Flight en route.

60.570 Weather changes. If weather reports available to the pilot enroute indicate that the weather conditions will be below the minimums allowing operation into the airport of destination at the expected time of arrival, the pilot shall not attempt a landing at the airport of destination but shall either proceed to the appropriate alternate airport as provided for in § 60.55, or proceed to an airport where weather conditions are at such time equal to or better than the weather minimums described in § 60.54. (For scheduled air carrier operation, see § 61.7106.)

60.571 Communications contacts. The pilot shall maintain a continuous listening watch on the appropriate radio frequency and shall, by radio, contact and report as soon as possible to the appropriate communication station the time and altitude of passing each radio fix or other check point designated by the Administrator or specified in the flight plan together with unanticipated weather conditions being encountered and any other information pertinent to the aircraft movement and, further, if not within an airway traffic control area, shall, prior to entering a control zone of intersection, served by a radio voice communication station of the Administrator, establish communication with such station, directly or through other communication channels, forwarding the expected time of arrival over the center of such zone, the altitude to be flown through such zone, and the course or courses proposed to be followed while within such zone.

60.5710 Aircraft utilizing air carrier communication facilities shall transmit information as required in this paragraph through such facilities, or such information may be transmitted directly by radio, to the appropriate agency of the Administrator.

NOTE.—For further information concerning aids to air navigation, see *Air Navigation Radio Aids*, published periodically by the Administrator of Civil Aeronautics.

60.572 Communications failure. In the event of the electrical or the mechanical failure of aircraft two-way communication equipment or in the event that the pilot does not receive radio signals sufficient to permit him to maintain instrument navigation, one of the following procedures shall be observed:

60.5720(*a*) Continue flight in accordance with cantact flight rules. The pilot may proceed provided that the flight may be made in accordance with contact flight rules as provided for in §60.4.

60.5721(*b*) Effect a landing. The pilot may effect a landing at the nearest suitable airport at which favorable weather conditions exist and where no airway traffic control center is located.

60.5722(*c*) Continue flight in accordance with flight plan. In the event weather conditions do not permit the procedures provided for in §60.5720 or §60.5721, the pilot may, when sufficient radio signals are received, proceed according to his flight plan, including any amending instructions issued and acknowledged en route, with particular attention to maintaining his last acknowledged assigned altitude until the approach time last authorized for, and acknowledged by, the pilot of such aircraft, after which landing may be made.

NOTE.—Normal traffic will resume as soon as the aircraft has landed or been accounted for, but in any event in not more than 30 minutes after the approach time last authorized for the aircraft and acknowledged by the pilot of such aircraft.

60.573 Flight plan changes. No change shall be made en route in any approved flight plan until approval has first been obtained from the airway traffic-control center of the Administrator for the area in which the flight is progressing, unless an emergency situation arises which requires immediate decision and action, in which case as soon as possible after such emergency authority is exercised, the pilot shall inform the proper control center of the new flight plan and obtain approval therefor.

60.58 Flight altitudes. Unless different altitudes are assigned by an airway traffic-control center of the Administrator, the following flight altitudes shall govern flights made in accordance with instrument flight rules. (See § 60.3504.)

60.580 Flight altitudes along green civil airways. The following rules will govern the altitude at which aircraft shall fly when making flights along green civil airways:

60.5800 Eastbound flights. Aircraft making good a true course of from 0° (or 360°) to, but not including, 180° along a green civil airway shall fly at an ODD thousand-foot level above sea level (such as 3,000, 5,000, or 7,000 feet).

60.5801 Westbound flights. Aircraft making good a true course of from 180° to, but not including, 360° (or 0°) along a green civil airway shall fly at an EVEN thousand-foot level above sea level (such as 2,000, 4,000, or 6,000 feet).

60.581 Flight altitudes along amber civil airways. The following rules will govern the altitude at which aircraft shall fly when making flights along amber civil airways:

60.5810 Northbound flights. Aircraft making good a true course of from 270° to, but not including, 90° along an amber civil airway shall fly at an ODD thousand-foot level above sea level (such as 3,000, 5,000, or 7,000 feet).

60.5811 Southbound flights. Aircraft making good a true course of from 90° to, but not including, 270° along an amber civil airway shall fly at an EVEN thousand-foot level above sea level (such as 2,000, 4,000, or 6,000 feet).

60.582 Flight altitudes along red civil airways. The following rules will govern the altitude at which aircraft shall fly when making flights along red civil airways:

60.5820 Eastbound flights. Aircraft making good a true course of 0° (or 360°) to, but not including, 180° along a red civil airway shall fly at an ODD thousand-foot level above sea level (such as 3,000, 5,000, or 7,000 feet).

60.5821 Westbound flights. Aircraft making good a true course of 180° to, but not including, 360° (or 0°) along a red civil airway shall fly at an EVEN thousand-foot level above sea level (such as 2,000, 4,000, or 6,000 feet).

60.583 Flight altitudes along blue civil airways. The following rules will govern the altitude at which aircraft shall fly when making flights along blue civil airways:

60.5830 Northbound flights. Aircraft making good a true course of from 270° to, but not including, 90° along a blue civil airway shall fly at an ODD thousand-foot level above sea level (such as 3,000, 5,000, or 7,000 feet).

60.5831 Southbound flights. Aircraft making good a true course of from 90° to, but not including, 270° along a blue civil airway shall fly at an EVEN thousand-foot level above sea level (such as 2,000, 4,000, or 6,000 feet).

60.584 Flight altitudes on airway intersections. The following flight procedure and altitude rules will govern aircraft making flights on the civil airways where two or more such airways intersect.

60.5840 Flight on green civil airway. An aircraft flying along a green civil airway and continuing the flight through a green zone of intersection shall, while within a green zone of intersection, maintain the altitude approved for flight on the green civil airway being followed and, upon leaving a green zone of intersection, shall assume an altitude prescribed for the airway to be followed.

60.5841 Flight on amber civil airway.

60.58410 Through green zone of intersection. An aircraft flying along an amber civil airway and continuing flight through a green zone of intersection shall, while within a green zone of intersection, maintain an altitude 500 feet higher than the altitude approved for flight on the amber civil airway being followed and, upon leaving a green zone of intersection, shall assume an altitude prescribed for the airway to be followed.

60.58411 Through amber zone of intersection. An aircraft flying along an amber civil airway and continuing the flight through an amber zone of intersection shall, while within an amber zone of intersection, maintain the altitude approved for flight on the amber civil airway being followed and, upon leaving an amber zone of intersection, shall assume an altitude prescribed for the airway to be followed.

60.5842 Flight on red civil airway.

60.58420 Through green zone of intersection. An aircraft flying along a red civil airway and continuing flight through a green zone of intersection shall, while within a green zone of intersection, maintain an altitude 500 feet higher than the altitude approved for flight on the red civil airway being followed and, upon leaving a green zone of intersection, shall assume an altitude prescribed for the airway to be followed.

60.58421 Through amber zone of intersection. An aircraft flying along a red civil airway and continuing flight through an amber zone of intersection shall, while within an amber zone of intersection, maintain an altitude 500 feet higher than the altitude approved for flight on the red civil airway being followed and, upon leaving an amber zone of intersection, shall assume an altitude prescribed for the airway to be followed.

60.58422 Through red zone of intersection. An aircraft flying along a red civil airway and continuing flight through a red zone of intersection shall, while within a red zone of intersection, maintain an altitude approved for flight on the red civil airway being followed and, upon leaving the red zone of intersection, shall assume an altitude prescribed for the airway to be followed.

60.5843 Flight on blue civil airway.

60.58430 Through a green, amber, or red zone of intersection. An aircraft flying along a blue civil airway and continuing flight through a green, amber, or red zone of intersection shall, while within such zone of intersection, maintain an altitude 500 feet higher than the altitude approved for flight on the blue civil airway being followed and, upon leaving such zone of intersection, shall assume an altitude prescribed for the airway to be followed.

60.585 Flight altitudes on off-airway flights. The following rules will govern the altitudes of aircraft making instrument flights when approaching for crossing a civil airway not at a control zone of intersection:

60.5850(*a*) **Eastbound flights.** Aircraft making good a true course of 0° (or 360°) to, but not including, 180° shall fly at an ODD thousand-foot level plus 500 feet, above sea level (such as 3,500, 5,500, or 7,500 feet); and

60.5851(*b*) **Westbound flights.** Aircraft making good a true course of 180° to, but not including, 360° (or 0°) shall fly at an EVEN thousand-foot level plus 500 feet, above sea level (such as 2,500, 4,500, or 6,500 feet).

60.586 Crossing an airway. Unless otherwise instructed by an airway traffic control center of the Administrator, a civil airway shall not be crossed at an angle of less than 45° to such airway, and the appropriate altitude as prescribed in § 60.585, shall be maintained throughout the entire crossing of such airway: *Provided, however,* That if such crossing is through any part of a zone of intersection the pertinent provisions of § 60.584 shall govern, and if such crossing is through any part of a control zone of intersection the pertinent provisions of §§ 60.571 and 60.584 shall govern.

60.59 Approach and departure procedures. (To be issued.)

60.6 Light and signal rules.

60.60 (Unassigned.)

60.61 Airplane lights. Between sunset and sunrise, all airplanes in flight shall show position lights certificated, and installed in accordance with the applicable provisions of Parts 15 and 04.

60.62 Airship lights. Between sunset and sunrise, airships shall carry and display the same lights prescribed for non-air carrier airplanes, except that the side lights shall be doubled horizontally in a fore and aft position and the rear light shall be doubled vertically. Lights in a pair shall be at least 7 feet apart.

60.63 Balloon lights. Between sunset and sunrise, a free balloon shall display one steady white light and one flashing red light, both lights to be visible all around the horizon at a distance of at least 2 miles under clear atmospheric conditions. The white light shall be located not less than 20 feet below the car and the red light shall be located not less than 7, nor more than 10, feet below the white light. Between sunset and sunrise, a fixed balloon, or airship, shall carry 3 lights—red, white, and red—in a vertical line, one over the other, visible at least 2 miles under clear atmospheric conditions. The top light shall not be less than 20 feet below the car, and the lights shall be not less than 7, nor more than 10, feet apart.

60.64 Lights on stationary aircraft. Between sunset and sunrise, all airplanes which are on the surface of water and not under way, or which are moored or anchored in navigation lanes, shall show in all directions an anchor light in accordance with the applicable provisions of Part 04. Between sunset and sunrise, balloon and airship mooring cables shall show groups of 3 red lights at intervals of at least every 100 feet, measured from the car. The first light in the first group shall be approximately 20 feet from the lower red balloon light. The object to which the balloon is moored on the ground shall have an adequate group of lights to mark its position.

60.65 Signals on stationary aircraft. By day, balloon and airship mooring cables shall be marked with chrome yellow-colored conical streamers not less than 10 inches in diameter at the mouth and 7 feet long. The object to which the balloon or airship is moored on the

ground shall have the same kind of streamers, which must be in the same position as the lights specified in § 60.64.

60.66 Distress signals. The following signals, separately or together shall, where practicable, be used in case of distress:

60.660(*a*) The international signal, S O S by radio: In radiotelephony, the spoken expression MAYDAY (corresponding to the French pronunciation of the expression "m'aider"). When, owing to the rapidity of the maneuvers to be accomplished, an aircraft is unable to transmit the intended message, the signal P A N not followed by a message retains such meaning.

60.661(*b*) The international code flag signal of Distress, NC.

60.662(*c*) A square flag having either above or below it a ball, or anything resembling a ball.

60.67 Forced landing signals. When an aircraft is forced to land at night at an airport, it shall signal its forced landing by making a series of short flashes with its navigation lights, if practicable to do so.

60.68 Fog signals. In fog, mist, or heavy weather, an aircraft on the water in navigation lanes shall signal its presence by a sound device emitting a signal for about 5 seconds at one-minute intervals.

60.7 Acrobatic flight rules.

60.70 Prohibited zones. No person shall acrobatically fly an aircraft—

60.700(*a*) at any height whatsoever over a congested area of any city, town, or settlement, or over any open-air assembly of persons, or over any airport or landing area or within 1,000 feet horizontally thereof, or within any control zone unless under the supervision of an inspector of the Administrator observing flight tests and then only between 2,000 and 5,000 feet above the ground or water.

60.701(*b*) at any height less than 1,500 feet over any place over which flight is not otherwise restricted.

60.702(*c*) at any place unless the visibility is at least 3 miles and the ceiling at least 3,000 feet, and unless the pilot has first ascertained that there is no danger of collision with other aircraft.

60.71 Acrobatics while carrying persons. No person shall acrobatically fly an aircraft while carrying any other person or persons for hire: *Provided, however*, That this provision shall not apply to the giving of instruction in acrobatic flying to a person receiving dual instruction.

60.72 Equipment for acrobatics. Each person in an aircraft flown acrobatically shall be properly equipped with a parachute manufactured under a valid type certificate and maintained in accordance with the provisions of the Civil Air Regulations.

60.73 Parachute jump. No person shall make any exhibition, test, training, or demonstration parachute jump, unless wearing a certificated and properly maintained auxiliary parachute so arranged that it can be operated if the first parachute should fail to function or become fouled. Whenever an auxiliary parachute is required, it shall consist of a single-harness pack.

60.730 Altitude before jump. No person shall make any exhibition, training, or demonstration parachute jump from an altitude of less than 2,000 feet above the surface of the ground or water.

60.731 Delayed jump. No person shall delay opening his parachute more than is necessary to properly and safely clear the aircraft, which in no case, except in an emergency jump, shall be less than 1,500 feet above the surface of the ground.

60.732 Jump in high wind. No person shall make any exhibition, test, training, or demonstration parachute jump from any aircraft when the surface wind is more than 15 miles per hour.

60.733 Jump near open water. No person shall make any exhibition, test, training, or demonstration parachute jump from any aircraft within 2 miles horizontally from any body of water, unless the jumper wears a flotation device approved by the Administrator and unless motor-powered marine rescue equipment is available.

NOTE.—§§ 60.71, 60.72, and 60.73 do not apply to military personnel when flying, or flying in, military aircraft.

60.8 Air-meet rules.

60.80 Classification. Air meets will be classified as follows:

60.800 Class 1 air meets. Meaning those meets which will receive wide publicity, large crowds, and large numbers of visiting aircraft, and in which any one or all of the following events are included:

60.8000(*a*) Races in which "NC," "NR," or "NX" aircraft are permitted to enter.

60.8001(*b*) Acrobatic flights over the airport at or below 1,500 feet.

60.8002(*c*) Formation flying over the airport at or below 1,500 feet.

60.8003(*d*) So called "crazy flying" over the airport.

60.8004(*e*) Parachute jumping for a spot.

60.801 Class 2 air meets. Meaning those meets which are locally sponsored amateur meets and which may combine passenger-carrying activities with one or more of the following events:

60.8010(*a*) Races for "NC" aircraft.

60.8011(*b*) Simulated bomb dropping contests.

60.8012(*c*) Acrobatic flights over the airport above 1,500 feet.

60.8013(*d*) Formation flights over the airport above 1,500 feet.

60.8014(*e*) Paper-cutting over the airport above 1,500 feet.

60.8015(*f*) Balloon-bursting over the airport above 1,500 feet.

60.8016(*g*) Spot landing contests (switches not cut).

60.8017(*h*) Parachute jumping (not for spot).

60.81 Certificate of waiver required. No air meet shall be held or conducted, or authorized to be held or conducted, on a civil airway or elsewhere within the United States where the operation or navigation of aircraft engaged in such air meet directly affects, or may endanger safety in interstate, overseas, or foreign air commerce, unless a certificate of waiver covering the activities of such meet is issued by the Administrator.

NOTE.—Application for a certificate of waiver for an air meet should be made in accordance with § 60.91 at least 15 days prior to the proposed air meet in the case of a class 1 air meet and at least 5 days prior to the proposed air meet in the case of a class 2 air meet.

60.82 (Unassigned.)

60.83 (Unassigned.)

60.84 (Unassigned.)

60.85 (Unassigned.)

60.86 (Unassigned.)

60.87 (Unassigned.)

60.88 (Unassigned.)

60.89 Air meet rules. The following rules shall apply to, and govern the conduct of, all Class 1 and Class 2 air meets for which a permit may be issued by the Administrator.

60.8900(*a*) No person shall be permitted to take part in any air meet until he has furnished the air-meet officials a signed statement to the effect that he has read the rules and regulations governing such meets, and which obligates him to abide by all local and Civil Aeronautics Board rules and regulations and orders.

60.8901(*b*) No person shall be permitted on the operations area of an airport or flying field during any air meet held thereon, except the operating personnel, contestants and their crews, police, State and Federal aeronautics officials and inspectors, and authorized press, radio, and photographer personnel.

60.8902(*c*) A white dead line paralleling the area reserved for spectators and at least 200 feet in front of such area shall be provided by the air-meet officials and the crossing by any aircraft of this dead line in the direction of the spectators will result in the suspension of the certificate of the operator of such aircraft.

60.8903(*d*) The air-meet management shall be held responsible for the proper policing of the air-meet area within the airport and for other suitable provisions to insure that all spectators and unauthorized persons are kept off prohibited areas.

60.8904(*e*) No air meet event shall be conducted unless the operations area of the airport or flying field is clear, the operating personnel are present, sufficient police or guards are on duty and at their posts, no other air operations are going on and scheduled air carrier aircraft are not flying in the vicinity.

60.8905(*f*) Participants in racing events shall not come in closer proximity to other participating aircraft than 50 feet, and a participant must be not less than 150 feet in the lead before cutting into the same lane of plane or planes just passed.

60.8906(*g*) No aircraft shall be flown toward, over, nor within 200 feet horizontally of, the grandstand or spectators.

60.8907(*h*) No aircraft performing acrobatics shall be flown toward or over the grandstands or spectators nor within 500 feet thereof.

60.8908(*i*) No object shall be dropped or released from aircraft in connection with an air meet which will fall over, toward, nor within 500 feet of the grandstands or spectators.

60.8909(*j*) Race-horse starts shall be prohibited except when such starts provide for minimum spacing from wing tip to wing tip of at least 100 feet between participating aircraft and then only in case the take-off area is suitable for such starts and a scattering pylon is used for the first pylon, which scattering pylon must be located beyond the boundaries of the airport at least a sufficient distance to permit all aircraft participating to attain their normal speed before reaching it. For races in which aircraft capable of 200 miles per hour or over participate, this pylon and racecourse pylons shall be so located that no continuous turn of over 100 degrees is required.

60.8910(*k*) The home pylon shall be located at least 800 feet from the grandstands or spectators, and racing aircraft shall not be flown toward, over, or within a minimum distance of 500 feet horizontally of the grandstands or spectators. The home stretches of all racecourses shall be parallel to the grandstands and other sections provided for spectators.

60.8911(*l*) For purposes of controlling traffic at, and in the vicinity of, an airport or other landing area used for an air meet, signals shall be located either near the announcer's stand or near the home pylon and shall consist either of a large white letter "O" indicating open, and a large white letter "X" indicating closed, or by the words spelled in large white letters on the ground, "OPEN" or "CLOSED," as the case may be. Such signals shall be so constructed as to be easily legible from 2,000 feet altitude and these signals shall be properly operated during the period of the air meet to indicate whether the airport is open for landing to nonparticipants in the meet, or whether it is closed. For the safety and convenience of nonparticipating aircraft, the airport or landing area shall be declared open for landing and take-off purposes for a period of 5 minutes at not more than 30-minute intervals during the air meet.

60.8912(*m*) A physician and ambulance and a fully equipped emergency truck shall be available at the air meet for emergency use. This provision is mandatory for Class 1 Air Meets only.

60.9 Miscellaneous air traffic rules.

60.90 Nonapplication of air traffic rules. The air traffic rules, or any particular air traffic rule, shall not apply in the following cases:

60.900(*a*) When special circumstances render nonobservance necessary to avoid immediate danger, or when such nonobservance is required because of stress of weather conditions which could not reasonably have been foreseen, or other unavoidable causes. Such nonobservance shall be reported within 24 hours in full detail by letter to the Administrator, including the emergency making such nonobservance necessary, the results accomplished by nonobservance, and when regular observance was resumed after the emergency had passed. In such case of nonobservance if, after investigation by the Administrator, nonobservance is deemed to have been necessary in the interests of safety, no infraction of these rules will have been incurred.

60.91 Certificate of waiver. When, in the opinion of the Administrator, the public safety, the safety of those engaged in aeronautics, or the encouragement and development of civil aeronautics requires a nonobservance of the air traffic rules, or any part thereof, a certficate of waiver of the air traffic rules, or any part thereof, may be issued by the Administrator.

60.910 Application. Application for a certificate of waiver shall be made upon the applicable form prescribed and furnished by the Administrator.

60.911 Duration. The duration of a certificate of waiver shall be limited to the period prescribed on such certificate, except that it shall immediately expire at any time an authorized inspector of the Administrator shall demand the surrender of such certificate after inspection or examination.

60.912 Surrender. Upon the suspension, revocation, or expiration of a certificate of waiver, the holder thereof shall, upon request, surrender such certificate to any officer or employee of the Administrator.

60.92 Aircraft on water. Seaplanes on the water shall navigate according to the laws and regulations of the United States governing the navigation and operation of watercraft, except as otherwise provided in these regulations.

60.93 Aircraft model flying activities, supervision of. No model aircraft shall be flown from, or over, any airport or landing field unless permission therefor, in writing, has been secured from the airport manager or his duly authorized representative. The airport manager shall designate the portion of the field to be used and shall take all necessary precautions to assure the safety of the public on the ground and of aircraft in the air. Rules governing the conduct of such activity shall be drawn and shall include:

60.930(*a*) The definite boundaries of the area to be utilized.

60.931(*b*) The periods of suspensions of activity before, during, and after any scheduled or other aircraft operations.

60.932(*c*) The limitation of duration of flight of the models.

60.933(*d*) Procedure for the retrieving of models.

60.934(*e*) Notification, by the airport manager to all model operators so engaged, of the rules as drawn.

60.94 Authorization required. No person shall operate or attempt to operate any civil aircraft of the United States from any State, Territory or possession of the United States or the District of Columbia to or over any foreign country, over the high seas, or within or away from any foreign country, unless a Foreign Flight Authorization for such operation has been issued by the Administrator prior to each such operation or attempt to operate; nor shall such operation be conducted otherwise than in accordance with the terms, conditions, and limitations prescribed and set forth in such Authorization: *Provided,* That no Authorization is required for the operation of civil aircraft in overseas or foreign air transportation conducted pursuant to the terms of an Air Carrier Operating Certificate issued by the Administrator, nor for the operation of civil aircraft within any of the following areas:

1. Those portions of the Dominion of Canada which lie within 250 miles of the territorial limits of the United States, provided that such aircraft are operated by and carry only United States or Canadian citizens or both;
2. The Republic of Cuba;
3. That portion of the Republic of Mexico which lies within 100 miles of the territorial limits of the United States; and
4. That portion of the high seas or international waters which lie within 100 miles of the territorial limits of the United States.

60.940 General requirements. No Foreign Flight Authorization will be issued unless the Administrator, or his representative, shall determine that:

1. The aircraft and aircraft equipment to be used for the proposed flight are adequate to insure the safe operation of such flight;
2. The airmen and other personnel are qualified for the type of flight contemplated;
3. The foreign countries through which the flight will proceed do not prohibit the entry of the passengers and goods to be carried;
4. The purpose of the flight is lawful and consistent with the policies of the United States Government;
5. Each foreign country through which the flight will proceed, has or will accord permission to operate the aircraft therein;

NOTE.—After receipt by the Administrator of application for foreign flight, the Administrator will, if he perceives no objection, request the Secretary of State to obtain permission through the usual diplomatic channels from each of the foreign governments which requires special permission for flight by United States registered aircraft therein, except in respect to countries from which the pilot is permitted to obtain his own permit directly.

6. The airman who will be in command of the aircraft is familiar with all applicable provisions of International Conventions and Arrangements, and of the laws and regulations of the foreign countries through which the proposed flight will take place.

NOTE.—Copies of such conventions and arrangements may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for five cents per copy. Information concerning air traffic rules, prohibited articles, prohibited areas, ports of entry, customs and public health matters, etc., may be obtained from the Administrator of Civil Aeronautics, or from the Department of State, or from the respective foreign consulates.

60.941 Application. Application for a Foreign Flight Authorization shall be made in duplicate upon the applicable form prescribed and furnished by the Administrator.

NOTE.—Applicant is advised to file application as far in advance as possible of the date of contemplated departure from the United States. Three weeks to two months are required to secure permission from certain foreign countries which require special permission for flight of United States registered aircraft therein, and generally the more extensive the proposed flight and the greater the number of countries through which the flight is to proceed, the more time is required to secure permissions from each foreign country. Applications involving unusual circumstances, such as long distance over-water flights, should be made several months before the contemplated departure.

60.942 Display. The Foreign Flight Authorization shall be kept in the personal possession of the pilot in command at all times during operation pursuant to the Authorization, and shall be presented for inspection upon the request of any authorized representative of the Administrator, or when the aircraft is within any foreign country, upon the request of any authorized representative of such government, or political subdivision thereof.

60.943 Duration. The duration of a Foreign Flight Authorization shall be limited to the period prescribed on such Authorization.

60.944 Surrender. Upon the suspension, revocation, or expiration of a Foreign Flight Authorization, the holder of such Authorization shall, upon request, surrender such Authorization to any officer or employee of the Administrator.

60.95 Emergency regulations.

60.950 Definitions. (*a*) As used in this section (60.95), the term "aircraft" means all aircraft other than those operated by scheduled air carriers while on their certificated routes, the United States Army or Navy, the Civil Aeronautics Administration, or the Civil Aeronautics Board.

(*b*) As used in this section (60.95) a "designated landing area" is a landing area designated by the Administrator for the landing and take-off of aircraft during the period of national emergency.

(*c*) As used in this section (60.95) a "local flying area" is an area adjacent to a designated landing area, including any channel leading thereto, which has been set aside by the Administrator, or his authorized representative, for local flying and a "local flight" is a flight wholly within such area.

(*d*) As used in this section (60.95) a "vital defense area" is an area set aside by the Secretary of War, or the Administrator upon the request or approval of the Secretary of War, within which the operation of aircraft is prohibited or is authorized only subject to prescribed conditions.

(*e*) As used in this section (60.95) a "zone of military operations" is an area designated as such by the Secretary of War, or the Administrator upon the request or with the approval of the Secretary of War.

60.951 Flight rules. (*a*) Except upon the prior approval of the Administrator, or his authorized representative, no person shall (1) take off any aircraft from a place other than a designated landing area, or (2) land any aircraft at any place other than a designated landing area except where such landing is caused by unforseeable circumstances beyond the control of such person, in which event the pilot of the aircraft shall make a report to the Administrator or his designee at the landing area to which he was cleared as soon as possible, and in no case more than 24 hours after such landing, setting forth fully the reasons therefor.

(*b*) No person shall take off any aircraft from a designated landing area unless, immediately prior to such take-off, he shall have submitted to the Administrator or a person designated by him at such landing area, sufficient information to identify adequately the pilot, occupants, and the aircraft, and to describe the route, duration, nature, and purpose of the proposed flight: *Provided*, That if a continuous series of local flights with the same occupants in the airplane is contemplated, such information need be submitted only once for such series.

(*c*) No person shall take off any aircraft from a designated landing area unless, immediately prior to such take-off, he shall have secured a clearance for take-off, issued in accordance with this section, from the Administrator or a person designated by him: *Provided*, That one clearance only need be secured for a continuous series of local flights with the same occupants in the airplane. No clearance shall be granted (1) unless the applicant for clearance demonstrates

to the Administrator, or person designated by him, that the applicant is the holder of a currently effective pilot certificate and, after January 8, 1942, presents the identification card required by § 60.322, (2) unless the route proposed to be flown by the applicant permits compliance with § 60.951(*h*) with respect to vital defense areas and zones of military operation, (3) unless the aircraft proposed to be flown is equipped with functioning two-way radio if the flight is other than a local flight, and (4) unless the issuance of such clearance is consistent with instructions issued by the Civil Aeronautics Administration: *Provided*, That with the special permission of the Administrator, or a person designated by him for this purpose, a flight may be cleared to operate in daylight in accordance with daylight contact flight rules beyond the local flying area of the landing area from which take-off is made notwithstanding that the aircraft flown is not equipped with functioning two-way radio. No clearance under this section shall be deemed to authorize the violation of any regulation.

(*d*) No person shall take off any aircraft from a designated landing area unless, immediately prior to such take-off, if the flight be to another landing area and requires operation into or within a vital defense area or a zone of military operations, he shall have transmitted to such landing area, through the person granting clearance, a message by telephone or telegraph identifying the aircraft to be flown and stating the estimated time of arrival: *Provided*, That this requirement need not be met if a flight plan has been filed with Airway Traffic Control for the flight.

(*e*) No person shall take off any aircraft from a designated landing area unless, immediately prior to such take-off, he shall have familiarized himself with all available current flight information relating to the area proposed to be traversed on his flight.

(*f*) Immediately after landing an aircraft upon a designated landing area, the pilot of such aircraft shall submit to the Administrator, or person designated by him at such landing area, a copy of his clearance and such other information as may be required: *Provided*, That if a series of local flights is being made with the same occupants in the aircraft, such information need be submitted only after the final landing in such series.

(*g*) Immediately after landing upon a designated landing area after a flight from another designated landing area which involved operation into or with a vital defense area or zone of military operation, the pilot shall transmit to the landing area from which he was cleared for the flight, through the Administrator's designee at the landing area on which the landing was made, a message by telephone or telegraph identifying the aircraft flown and stating the time of arrival: *Provided*, That this requirement need not be met if a flight plan has been filed for the flight with Airway Traffic Control.

(*h*) No person shall operate an aircraft otherwise than in accordance with the description of the flight submitted to the Administrator or his designee at the landing area from which take-off was made, except in case of emergency in which event the pilot of the aircraft shall make a report to the Administrator, or his designee at the landing area of departure or arrival, as soon as possible after such deviation, describing the deviation and setting forth fully the reasons therefor.

(*i*) No person shall operate aircraft into or within a vital defense area or zone of military operations otherwise than in accordance with the conditions specified for such operation.

(*j*) No person shall leave an aircraft unattended under circumstances which would permit its operation by an unauthorized person without rendering the aircraft incapable of operation in a manner consistent with any instructions issued by the Administrator for this purpose.

60.952 Aircraft basing. (*a*) No person shall base an aircraft at any place within the United States other than a designated landing area without first obtaining specific permission from the Administrator issued upon such conditions as he deems necessary.

(*b*) Immediately upon basing at a designated landing area, the owner of an aircraft shall submit to the Administrator or person designated by him at such landing area sufficient information to identify the aircraft, its owner, and the last previous base. In the event that the aircraft is to be absent from its base at any time for more than 72 hours, the owner shall submit to the Administrator's designee at such base such information as may be necessary to permit him to locate the aircraft promptly in case of necessity. Prior to changing the base, the owner of an aircraft shall notify the Administrator or his designee at his present base of his intention, stating the name and location of the landing area to which the aircraft is to be transferred.

60.953 Landing area rules. (*a*) Every designated landing area shall provide means by which all available current flight information bearing upon flights from the landing area may be secured by persons operating aircraft on the landing area.

(*b*) Every designated landing area shall maintain adequate records of landings and take-offs in accordance with §§ 60.951 (*b*) and (*f*) and shall furnish such reports, summaries of operations, and records as may be required by the Administrator. Any authorized representative of the Army, Navy, Civil Aeronautics Administration or Civil Aeronautics Board shall be permitted to inspect the landing area and have access to all records, buildings, and equipment.

(*c*) The Administrator may, at any time, cancel the designation of a landing area if he deems such action necessary to the public safety or in the interest of national defense.

60.954 False statements and alteration of documents. No person shall forge, counterfeit, alter, or mutilate any record or document required by or pursuant to this section (60.95) or make any false or misleading statements of information required by or pursuant to this section (60.95).

60.96 Weather information. Air carriers and their employees, except pilots while in scheduled flight within the continental limits of the United States, shall make available to the United States Weather Bureau and to the Administrator such weather information and data in their possession as the Administrator may direct, to be submitted in the form and manner prescribed by the Administrator.

60.960 Transmission of weather information by pilots during the present war emergency. (*a*) A pilot of aircraft in flight shall transmit weather information only in code: *Provided*, That such information may be transmitted in plain language in extreme emergency involving safety of life or property. In the event of such deviation from code, a report shall be made to the Administrator within 24 hours setting forth fully the reasons therefor.

(*b*) A pilot of aircraft in flight shall not repeat weather information received from ground stations, or use the terms "On top," "CFR," "CTC/Altitude," and "Altitude/CFR" when transmitting flight plans by radio.

(*c*) Immediately upon completion of flight, aircraft landing code forms supplied pilots shall be surrendered to the appropriate flight clearance officer, or military, or company operations office, or destroyed where such surrender is impracticable for reasons beyond the control of the pilot. A report shall be made in writing to the Administrator within 24 hours of the destruction of such code setting forth in detail the reasons for such destruction.

60.97 Transportation of explosives. The following regulations shall govern the carriage of explosives in civil aircraft:

60.970 Explosives defined. As used in this section (60.97) the term "Explosives" shall mean any article or substance classed as "Class A Explosives", "Class B Explosives", "Class C Explosives", "Not accepted" or "Forbidden", by the Interstate Commerce Commission in Part 2 of its *Regulations for the Transportation of Explosives and Other Dangerous Articles by Land and Water in Rail Freight, Express, and Baggage Services, and by Motor Vehicle (Highway), and Water*, effective January 7, 1941. It shall not include the aircraft's signalling or safety equipment (such as a Very pistol or landing flares) nor materials for industrial or agricultural spraying, nor shall it include small arms ammunition in the possession of (*a*) a member of the flight crew; (*b*) a member of the armed forces of the United States or of the armed forces of any of its allies; or (*c*) an official, employee or officer of the United States, a State, Territory or Possession, or a political subdivision of any such State, Territory or Possession who is lawfully carrying arms on official duty.

60.971 Prohibited explosives. No person shall operate a civil aircraft in flight carrying any article listed by the Interstate Commerce Commission as a "forbidden explosive" for shipment by freight, in Part 4, Section 503, of its *Regulations for the Transportation of Explosives and Other Dangerous Articles by Land and Water in Rail Freight, Express, and Baggage Services, and by Motor Vehicle (Highway), and Water*, effective January 7, 1941: *Provided*, That the provisions of this section shall not apply in any instance where, and to the extent that, the Administrator (a) has found that the proposed deviation is necessary for the successful prosecution of the war, and (b) has issued a certificate of waiver therefor.

60.972 Acceptable explosives. No person shall operate a civil aircraft in passenger flight carrying any explosives other than those listed by the Interstate Commerce Commission as "acceptable explosives" for shipment by express in Part 5, Section 654, of its *Regulations for the Transportation of Explosives and Other Dangerous Articles by Land and Water in Rail Freight, Express, and Baggage Services, and by Motor Vehicle (Highway), and Water*, effective January 7, 1941. For the purposes of this section (60.97) an aircraft is deemed to be in "passenger flight" whenever there is aboard such aircraft in flight any person other than a member of the flight crew, a member or representative of the armed forces of the United States or any of its allies, or a representative of the Civil Aeronautics Administration or of the Civil Aeronautics Board: *Provided*, That the provisions of Section 60.91 shall not apply to this section insofar as it relates to scheduled air carrier operation.

60.973 Packing and shipping precautions. No person shall operate a civil aircraft in flight carrying explosives not otherwise prohibited by this section (60.97) unless:

(*a*) such explosives have been appropriately packed and marked in accordance with the regulations of the Interstate Commerce Commission in effect on March 25, 1942; and

(*b*) such explosives are being shipped by or for the armed forces of the United States or any of its allies; and

(*c*) such explosives have been placed in a baggage compartment inaccessible to passengers during flight; and

(*d*) such explosives and other cargo carried in the same compartment have been firmly lashed to the aircraft structure or otherwise secured in such manner as to prevent shifting in flight.

With respect to compliance with paragraphs (*a*) and (*b*) of this section, the operator of a civil aircraft may rely on a certificate signed by an authorized member of the armed forces of the United States that a given shipment meets the requirements of either or both of such paragraphs as the case may be.

60.974 Effect of lack of knowledge. No person shall be held to have violated the provisions of this section (60.97) in any case where he can show: (*a*) that he did not know the nature of the article so carried, (*b*) that the nature of such article could not be discovered by the exercise of reasonable care, and (*c*) that he exercised such reasonable care.

CIVIL AIR REGULATIONS

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