Federal Aviation Agency
Washington, D.C.

Civil Air Regulations, Part 60

AIR TRAFFIC RULES

Supplement No. 10, CAR 60 dated May 15, 1961 **January 18, 1963**

SUBJECT: Amendments 60–30, 60–31, and 60–32 to CAR 60. Rescission of SR–438.

Amendment 60–30 was adopted by the Administrator on December 13, 1962, to add section 60.28, Avoidance of disaster areas, to CAR 60 effective March 20, 1963. Section 60.28 was adopted to prohibit the flight of nonessential aircraft within designated disaster areas.

Amendment 60–31 was adopted by the Administrator on January 7, 1963, effective March 14, 1963, to except unmanned rockets from the scope of CAR 60.

Amendment 60–32 was adopted by the Administrator on January 11, 1963, effective January 17, 1963. This amendment revised CAR 60.18(b)(6)(ii) to permit flight below the visual glide slope during the final stages of an approach for landing.

SR–438 was rescinded by the Administrator on January 7, 1963, effective January 11, 1963, to eliminate a duplication of the requirements established in CAR 60.18.

Included in this supplement 10 as an addendum to CAR 60 are preambles to amendments 60–30, 60–31, and 60–32 which set forth the basis for these rule making actions.

Remove the following pages:	*Insert the following new pages:*
III and IV	III and IV
1 and 2	1 and 2
5 and 6	5 and 6
6–1 and 6–2 (after 3/20/63)	6–1 through 6–3
25 through 32	25 and 26
P–9 and P–10	P–9 through P–15

D. D. Thomas

D. D. THOMAS, *Director,*
Air Traffic Service.

Attachments.

Civil Air Regulations Part 60

Contents

General

	Section	Page
Scope	60.1	1
Operation over the high seas	60.1a	1
Authority of the pilot	60.2	1

General Flight Rules (GFR)

Application	60.10	1
Preflight action	60.11	1
Careless or reckless operation	60.12	2
Avoidance of prohibited and restricted areas	60.13	2
Right-of-way	60.14	2
Proximity of aircraft	60.15	3
Acrobatic flight	60.16	3
Minimum safe altitudes	60.17	3
Operation on and in the vicinity of an airport	60.18	4
Air traffic control instructions	60.19	5
Notification of arrival	60.20	5
Adherence to air traffic clearances	60.21	5
Water operations	60.22	5
Aircraft lights	60.23	5
Flight test	60.24	5
Altimeter setting	60.25	6
Flight crew members at controls	60.26	6
Aircraft speed	60.27	6
[Avoidance of disaster areas]	60.28	6

Visual Flight Rules (VFR)

Basic VFR minimum weather conditions	60.30	6
Special VFR minimum weather conditions in control zones	60.31	7
VFR cruising altitudes	60.32	7
VFR flight plan	60.33	7

Instrument Flight Rules (IFR)

Application	60.40	7
IFR flight plan	60.41	7
Alternate airport	60.42	8
Air traffic clearance	60.43	8
IFR cruising altitudes	60.44	8
Course to be flown	60.45	8
Instrument approach procedure	60.46	8
Radio communications	60.47	9
Radio communications failure	60.49	9

Definitions

Definitions	60.60	10

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

(Rev. 1/18/63)

Special Civil Air Regulations Which Affect Part 60

		Page
SR-397.	Authorization for the United States Forest Service To Deviate From the Civil Air Regulations	15
SR-424C.	Positive Air Traffic Control Areas; Positive Air Traffic Control Routes	17
SR-437.	Flight Plans for Flight of Civil Aircraft Over Cuba	21
SR-442.	New York International Airport Traffic Area Rules	33
SR-444.	Jet Advisory Areas	41
SR-445.	Reports of Navigation and Communications Equipment Malfunctions	45
SR-454A.	Amendment of Special Operating Rule Within Certain Areas of the State of Florida and Over Waters Adjacent Thereto	46-1

Addendum

Preambles to amendments to Civil Air Regulations, Part 60 ..... P-1

General

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

(a) Military aircraft of the United States Armed Forces when compliance with this Part has been waived by the Administrator or when appropriate military authority determines that noncompliance with this Part is required by military emergency, or current military necessity essential to the defense of the United States, and prior notice thereof is given to the Administrator. Such prior notice shall be given to the Administrator at the earliest time practicable and, to the extent time and circumstances permit, every reasonable effort shall be made to consult fully with the Administrator and to arrange in advance for the required deviation from the rules on a mutually acceptable basis.

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

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

[(c) Unmanned rockets.]

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

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

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

General Flight Rules (GFR)

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

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

of which he has been advised by air traffic control.

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

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

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

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

(c) Lack of vigilance by the pilot to observe and avoid other air traffic. This includes failure of the pilot to clear his position prior to starting any maneuver, either on the ground or in flight; and special flight activities which require such preoccupation by the pilot with cockpit duties as would prevent adequate vigilance outside the cockpit for the purpose of collision avoidance without compensation for such reduced degree of vigilance by the use of a competent observer in the aircraft, a chase aircraft, or other equivalent arrangements.

(d) Passing other aircraft too closely.

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

60.13 Avoidance of prohibited and restricted areas.

(a) *Prohibited area.* No person shall operate an aircraft within a prohibited area unless prior permission has been obtained from appropriate authority.

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

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

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

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

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

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

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

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

(d) *Overtaking.* An aircraft that is being overtaken has the right-of-way, and the overtaking aircraft, whether climbing, descending, or in horizontal flight, shall keep out of the way of the other aircraft by altering its course to the right, and no subsequent change in the relative

tower shall maintain such communications and pilots of aircraft having radio equipment permitting reception only from such control tower shall maintain a listening watch on the appropriate tower frequency while operating within the airport traffic area of that airport.

Note: Pilots of aircraft operating to or from uncontrolled airports within the airport traffic area are not required to maintain radio contact with the control tower. However, such pilots should maintain two-way radio communications or a listening watch when feasible.

(2) *Clearances.*

(i) *Take-off, landing or taxi clearance.* During the hours the airport traffic control tower is in operation, a clearance shall be obtained prior to taxiing on a runway, taking off, or landing. Authorization to taxi "to" a runway is authorization to cross runways that intersect the taxi route unless instructions to the contrary are received. Authorization to taxi "to" a runway shall not constitute a clearance to taxi "on" that runway.

(ii) Pilots shall obtain a visual light signal clearance prior to taxiing on a runway and prior to take-off and landing at those airports where the control tower has authorized noncompliance with the requirement for two-way radio communications, or at those airports at which a non-United States Government airport traffic control tower is in operation if, for any reason, radio communications cannot be established.

(iii) Air traffic control may grant continuing permission to the pilot of an aircraft to conduct landings and take-offs within an airport traffic area of a controlled airport without individual clearance for each such operation.

(3) *Airport traffic area altitudes.* Unless prevented by terrain, obstacles or the VFR distance-from-cloud criteria, turbine powered fixed-wing aircraft shall be flown within the airport traffic area, including the traffic pattern, at an altitude of at least 1,500 feet, above the surface of the airport, until maneuvering for a safe landing requires further descent.

(4) *Traffic pattern direction.* Pilots of fixed-wing aircraft shall circle the airport to the left unless the airport traffic control tower specifies a different traffic pattern. In approaching to land, helicopters shall be flown in a manner which avoids the flow of fixed-wing aircraft.

(5) *Preferential runway system.*

(i) When a preferential runway system has been established by the Federal Aviation Agency for an airport, pilots of large fixed-wing aircraft landing at or taking off from such airport shall use a preferential runway when it has been assigned by the airport traffic control tower; *Provided,* That pilots shall retain final authority and responsibility for the operational safety of the aircraft and if a pilot determination is made to use another runway on the basis of safety, such other runway shall be authorized by air traffic control, traffic and other conditions permitting. When such authorization is given, the pilot retains responsibility for deviation from the provisions of the preferential runway system.

(ii) When a runway other than the originally assigned preferential runway is used, the pilot shall file, if requested by air traffic control, a written report of the reasons therefor, including a full description of the safety basis for his determination to use such other runway. This report shall be forwarded within 48 hours to the Chief, Airport Traffic Controller, Federal Aviation Agency, located at that airport at which the report is required.

(6) *Final approach.*

(i) When approaching to land on a runway served by a functioning instrument landing system (ILS), large fixed-wing aircraft equipped with a functioning ILS instrumentation shall be flown so as to remain at or above the glide slope between the outer marker and the middle marker; *Provided,* That when the VFR distance-from-cloud criteria require interception of the glide slope between the outer marker and the middle marker, large fixed-wing aircraft shall be flown so as to remain at or above the glide slope altitude between the point of interception and the middle marker.

(ii) When approaching to land on a runway served by visual glide slope devices, fixed-wing aircraft shall be flown so as to remain at or above the glide slope until [flight below the glide slope is necessary to complete a safe landing].

(7) *Departures.* Aircraft taking off shall be operated as follows:

(i) Pilots shall, prior to departure, familiarize themselves with any departure procedures established by the Federal Aviation Agency and shall comply with such procedures upon departure.

(ii) When departure procedure altitudes for a particular airport are not specified and unless otherwise required by the VFR distance-from-cloud criteria, large fixed-wing aircraft shall be flown so that a climb is made as rapidly as practicable to at least 1,500 feet above the surface: *Provided*, That the Federal Aviation Agency may specify a different rate of climb for a particular type of aircraft when a greater advantage in noise reduction can thereby be achieved with no derogation of safety.

(c) *Airports without control tower.* Aircraft being operated to or from an airport not served by a control tower shall be operated in accordance with the following rules:

(1) *Approaching to land.* When approaching for landing, fixed-wing aircraft shall be flown so that all turns are made to the left unless the airport displays light signals or standard visual markings of a type approved by the Federal Aviation Agency and which indicate that all turns are to be made to the right. When approaching for landing, helicopters shall be flown in a manner which avoids the flow of fixed-wing aircraft.

(2) *Departures.* Pilots of aircraft operating from an airport shall conform to the traffic patterns established for that airport.

(3) *Communications.* Aircraft being operated to or from an airport not served by a control tower, but at which an operative Federal Aviation Agency Flight Service Station is located and so depicted on the current appropriate Sectional Aeronautical Chart of the U.S. Coast and Geodetic Survey, or World Aeronautical Chart in the case of an area for which a Sectional Chart is not published, shall be operated in accordance with the following:

(i) Pilots of aircraft having radio equipment permitting two-way radio communications with the Flight Service Station shall maintain such communications when within 5 statute miles of the uncontrolled airport for purposes of receiving airport advisory information: *Provided*, That for instrument flight rules operations, air traffic control may require otherwise.

(ii) Pilots of aircraft having radio equipment permitting reception only from the Flight Service Station shall maintain a listening watch on the appropriate frequency when within 5 statute miles of the uncontrolled airport for purposes of receiving airport advisory information.

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

60.20 Notification of arrival. If a flight plan has been filed, the pilot in command of the aircraft, upon landing or completion of the flight, shall file an arrival or completion notice with the nearest Federal Aviation Agency communication station or control tower.

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

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

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

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

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

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

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

60.23 Aircraft lights. Between sunset and sunrise:

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

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

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

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

Note: International visual distress and urgency signals are contained in the FAA Flight Information Manual for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

60.24 Flight test. The following provisions shall apply to the flight testing of aircraft unless otherwise authorized by the Administrator under such conditions as he may prescribe:

(a) No person shall flight test an aircraft unless such flight test is conducted:

(1) Over open water or sparsely populated areas having light air traffic and approved by the Administrator; or

(2) Over an area designated by the Administrator.

(b) This section shall not apply to take-offs and landings and operations necessary for flights to and from approved flight areas of production aircraft and aircraft which have been subject to major alterations as defined in Part 18 of the Civil Air Regulations.

(c) All flight tests shall be conducted in accordance with such traffic rules as the Administrator may from time to time prescribe.

Note: It should be recognized that any flight operation that requires excessive preoccupation with cockpit duties may result in careless or reckless operation of aircraft. See Example (c) under section 60.12 of the Civil Air Regulations.

60.25 Altimeter setting. The cruising altitude or flight level of aircraft shall be maintained by reference to an altimeter which shall be set:

(a) At or below 23,500 feet MSL, to the current reported altimeter setting of a station along the route of flight within 100 nautical miles: *Provided,* That where there is no such station, the current reported altimeter setting of an appropriate available station shall be used: *And provided further,* That in aircraft having no radio the altimeter shall be set to the elevation of the airport of departure or appropriate altimeter settings available prior to departure shall be used.

(b) At or above 24,000 feet MSL, to 29.92″ Hg. The use of flights levels below this altitude is not permissible.

(c) For overseas operations, in ICAO Flight Information Regions, in accordance with ICAO Regional Supplementary Procedures.

675664 O - 63 - 2

Note: Flight levels appropriate to normally encountered atmospheric pressure are shown in the table following:

Atmospheric pressure in inches of mercury	Lowest usable flight level
29.92	240
29.91 to 29.42	245
29.41 to 28.92	250
28.91 to 28.42	255
28.41 to 27.92	260

60.26 Flight crew members at controls. All required flight crew members when on flight deck duty shall remain at their respective stations while the aircraft is taking off or landing, and while en route except when the absence of one such flight crew member is necessary for the performance of his duties in connection with the operation of the aircraft. All flight crew members shall keep their seat belts fastened when at their respective stations.

60.27 Aircraft speed. A person shall not operate an arriving aircraft at an indicated airspeed in excess of 250 knots (288 m.p.h.) during flight below 10,000 feet mean sea level within 30 nautical miles of an airport where a landing is intended or where a simulated approach will be conducted unless the operating limitations or military normal operating procedures require a greater airspeed, in which case the aircraft shall not be flown in excess of such speed.

[*60.28 Avoidance of disaster areas.*

[(a) Whenever the Administrator determines it to be necessary, the airspace below 2,000 feet above the surface over and within five statute miles of an aircraft or train accident, forest fire, earthquake, flood, or other disaster of substantial magnitude will be designated a disaster area. Designation will be made in a Notice to Airmen.

[(b) Aircraft may not be flown within a disaster area except under the following conditions:

[(1) Aircraft participating in airborne relief activities may be operated under the direction of the Agency responsible for relief activities.

[(2) Aircraft may be operated to or from an airport within the area if they do not hamper or endanger relief activities.

[(3) When flight around or above the area is impractical due to weather, terrain, or other considerations, aircraft may be operated en route through the area if they do not hamper or endanger relief activities and prior notice is given to the Air Traffic Service facility specified in the Notice to Airmen.

[(4) Aircraft may be operated through the area when specifically authorized under an IFR air traffic control clearance.

[(5) Aircraft carrying properly accredited news representatives or persons on official business pertaining to the disaster may be operated within the area. However, they shall be operated in accordance with section 60.17 and other applicable Civil Air Regulations and they may not be operated at or below altitudes being used by relief aircraft unless they have the specific approval of the Agency responsible for relief activities. Such approval, together with any special instructions, will normally be obtained through the Air Traffic Service facility specified in the Notice to Airmen. A flight plan containing the following shall be filed for news media and official business aircraft prior to operating in a disaster area:

[(i) Aircraft identification, type, and color;

[(ii) Radio communications frequencies to be used;

[(iii) Proposed time of entry and exit of the disaster area;

[(iv) Name of news media or other purpose of flight, and

[(v) Any other information deemed necessary by air traffic control.]

Visual Flight Rules (VFR)

60.30 Basic VFR minimum weather conditions. Aircraft shall not be flown VFR in weather conditions below those specified herein except as provided in section 60.31. When VFR flight operations are conducted in accordance with the provisions of section 60.32 at an altitude coincident with the designated base of the continental control area, control area or transition area, the visibility and clearance-from-cloud requirements applicable to the immediately underlying airspace shall govern.

(a) *Clearance from clouds.*

(1) *In controlled airspace.* Aircraft shall not be flown VFR less than 500 feet vertically under, 1,000 feet vertically over, and 2,000 feet horizontally from any cloud formation, except that in the continental control area, aircraft shall not be flown VFR less than 1,000 feet vertically and one mile horizontally from any cloud formation. Aircraft shall not be flown VFR within a control zone beneath the ceiling when the ceiling is less than 1,000 feet.

(2) *Outside controlled airspace.* When at an altitude of more than 1,200 feet above the surface, aircraft shall not be flown VFR less than 500 feet vertically under, 1,000 feet vertically over, and 2,000 feet horizontally from any cloud formation. When at an altitude of 1,200 feet or less above the surface, aircraft flown VFR shall be flown clear of clouds.

(b) *Visibility within controlled airspace.*

(1) *Control zones.* When the flight visibility is less than 3 miles, no person shall operate an aircraft VFR in flight within a control zone. When the ground visibility is less than 3 miles, no person shall take off or land an aircraft or enter the traffic pattern of an airport within a control zone.

(2) *Control area.* When the flight visibility is less than 3 miles, no person shall operate an aircraft VFR in flight within a control area.

(3) *Transition area.* When the flight visibility is less than three miles, no person shall operate an aircraft VFR within a transition area.

(4) *Continental control area.* When the flight visibility is less than 5 miles, no person shall operate an aircraft VFR in flight within the continental control area.

tory operating procedures in a Civil Air Regulation could compound the complexities involved in further developing and revising noise abatement flight techniques. It was held that the establishment of detailed procedures designed to minimize the noise problem at particular airports could best be devised and more readily improved if developed on a local basis. The Agency finds merit in this proposition and consideration is being given to drafting an air traffic rule of general applicability which will standardize all controlled airport traffic pattern rules to the extent practicable and provide for the establishment of detailed airport procedures on a local basis.

Many comments were directed to the proposed provision which would require jet aircraft to maintain an altitude at or above the ILS glide path. The view was expressed that the precise 3° angle should not be specified and should not apply to the point of touchdown. Further, the approach altitude requirement ought to be applicable to piston engine aircraft as well as jet aircraft. The proposal has been modified in light of these comments and the rule is phrased to require descent at or above the glide path setting by all large aircraft equipped with ILS instrumentation. The rule applies only until the aircraft reaches the middle marker so as to provide for a safe "flare-out" for a landing by the pilot.

The proposed restriction on the use of the airport by jet aircraft between the hours of 10 p.m. and 7 a.m. under certain surface wind conditions has also been revaluated and this provision has been omitted from the rule. The practice of prohibiting the use of various airports during certain specific hours could create critically serious problems to all air transportation patterns. The network of airports throughout the United States and the constant availability of these airports are essential to the maintenance of a sound air transportation system. The continuing growth of public acceptance of aviation as a major force in passenger transportation and the increasingly significant role of commercial aviation in the nation's economy are accomplishments which cannot be inhibited if the best interest of the public is to be served. It was concluded therefore that the extent of relief from the noise problem which this provision might have achieved would not have compensated the degree of restriction it would have imposed on domestic and foreign Air Commerce.

Recommendations were received from aircraft operators at Hughes, Hawthorne and Santa Monica Airports for modifications to the proposed rules which would provide for a more flexible operation to and from those airports. Some of these recommendations indicated a misunderstanding of the proposed rules, especially the applicability of the two-way radio requirement. The proposal did not provide that two way communication had to be established with the Los Angeles tower if an aircraft were being flown to or from any airport other than Los Angeles International Airport within the Los Angeles traffic pattern area provided the appropriate entry and departure areas were utilized. For example, aircraft may enter the southeast sector of the Los Angeles traffic pattern area and land at Hawthorne Airport without communicating with the Los Angeles tower. Likewise aircraft may depart Hawthorne to the south without communicating with the Los Angeles tower. It will also be noted that the proposed departure procedure from Hawthorne has been modified to permit turns as early as practicable after a take-off to the west.

It should also be made clear that all the required traffic pattern area entry and departure procedures, altitudes as well as routes, may be superseded by authorization of the control tower. The principal purpose in adopting these procedures is to establish a standardized, segregated flow of air traffic at these

various airports which would promote the controllers capability to provide for a safe and expeditious movement of traffic in the area. The rules intend that the controller be provided the flexibility to authorize flight operations in such manner as is best suited to the instant state of the traffic situation.

Recommendations for a re-designation of the traffic pattern area to exclude the downwind leg portion of the Santa Monica traffic pattern were also received. However, the advantages of a standardized dimension of the traffic pattern area are considered more significant than locally different dimensions especially since national application of the concept is being considered. Further, the rules herein adopted do not contemplate the imposition of a radio requirement or any other restriction to Santa Monica Airport traffic other than that which provides a degree of segregation between Hughes Airport traffic and traffic on the downwind leg of the Santa Monica Airport.

As stated above, consideration is being given to the development of an amendment to the Air Traffic Rules, Part 60, of the Civil Air Regulations, which would provide for a national application of standardized controlled airport traffic pattern rules. It is expected that this proposed amendment would accommodate locally developed detailed airport procedures and provide for the ready implementation of revisions to these local procedures. Further, such a general rule would minimize a requirement for several special rules at individual airports.

In consideration of the foregoing, the following Special Civil Air Regulation is hereby adopted to become effective April 4, 1960.

(*Note*: Pages 27–32 deleted by Supplement No. 10 dated January 18, 1963. The next page is 33.)

Amendment 60–29

Definition of Controlled Airspace

Adopted: Apr. 24, 1962
Effective: May 1, 1962
Published: Apr. 27, 1962
(27 F.R. 4012)

Draft Release No. 62–8, published as a Notice of Proposed Rule Making in the Federal Register on March 7, 1962 (27 F.R. 2183), gave public notice that the Federal Aviation Agency proposed to amend the definition of "transition area" contained in CAR 60.60. Under this proposal, transition areas designated to complement control zones would extend upward from 700 feet or higher above the surface in lieu of 1,200 feet or higher above the surface. The reasons for the amendment were outlined in detail in the draft release. All comments received in response to the draft release have been reviewed and have been given due consideration. No comments received indicated opposition to the proposal; however, several persons suggested specific modifications to the phrasing of the definition.

The Aircraft Owners and Pilots Association (AOPA) and three individuals, while concurring with the proposal, recommended that the definition specify that such areas normally be ten statute miles in radius. The AOPA contended that this would preclude the designation of unnecessarily large transition areas and that a circular configuration would simplify charting and promote ease of understanding. The Agency agrees that unnecessarily large transition areas must be avoided and it shall be the policy of the Agency to designate transition areas of minimum lateral dimensions consistent with the requirements of Instrument Flight Rules (IFR) operations. Criteria for use in determining the lateral dimensions of transition areas have been developed. However, since many significant local factors, such as an airport elevation, adjacent terrain and the minimum en route IFR altitudes must be considered, it is not feasible to establish in the definition that transition areas will normally be of a circular configuration and ten miles in radius. A circular configuration would, in some cases, result in the designation of more controlled airspace than is actually needed for IFR operations.

While the position of the AOPA is appreciated, the size and shape of transition areas should be based solely upon the operational considerations unique to specific locations. Sufficient flexibility must be retained for the efficient designation of controlled airspace; however, this policy does not preclude the designation of a circular configuration in those cases where considered practicable. For this reason, the amendment adopted herein does not establish specific lateral limits or configurations for transition areas.

In the implementation of Civil Air Regulations Amendment 60–21 a secondary, though significant, problem has arisen. Application of a transition area overlying an airport without a control zone but for which an instrument approach procedure has been prescribed revealed that, in some cases, the existing definition required the designation of more controlled airspace than required by IFR operations. The definition now provides that the "floor" of such controlled airspace may be designated only at a level of 700 feet above the surface. In certain cases, it has been found that by designating the perimeter portions of the transition area with a floor at 1,200 feet above the surface, significant additional uncontrolled airspace may be released for the use of Visual Flight Rules (VFR) operations with no adverse impact on the IFR user.

In consonance with its policy to designate only that controlled airspace required by IFR operations, the Agency concluded that provision should be made for the designation of transition area floors at higher levels. Accordingly, this proposal was coordinated informally with representatives of the following interested user groups:

Air Transport Association
Aircraft Owners & Pilots Association
Air Line Pilots Association
Air Traffic Control Association
Department of the Air Force
Department of the Army
Department of the Navy
General Aviation Council
National Association of State Aviation Officials
National Aviation Trades Association
National Business Aircraft Association
National Pilots Association

The representatives of all these organizations endorsed this change, with the exception of the National Aviation Trades Association, which did not choose to comment. The Air Transport Association (ATA) expressed concern regarding the retention of the base of the transition area at 700 feet above the surface when required to encompass instrument approach procedures, recommending that the definition provide a specific statement to this effect. A review of the proposed wording indicated it could be interpreted to eliminate the flexibility necessary for the efficient designation of controlled airspace. It is not necessary in all cases to designate the entire transition area with a floor of 700 feet to encompass the instrument approach procedure. It shall be the policy of the Agency to designate the floor of transition areas in conjunction with airports at 700 feet above the surface to the lateral extent dictated by the appropriate criteria for the instrument procedures and then raise the floor to 1,200 feet or higher as appropriate. Since the amendatory language adequately expressed the Agency intent, it is not considered necessary to adopt the specific language recommended by the ATA. This additional change is, therefore, being adopted in conjunction with the proposal contained in Draft Release No. 62–8.

Amendment revised section 60.60

Amendment 60–30

Avoidance of Disaster Areas

Adopted: December 13, 1962
Effective: March 20, 1963
Published: December 20, 1962
(27 F.R. 12614)

On April 6, 1962, notice was given in Draft Release No. 62–17 (27 F.R. 3818), that the Federal Aviation Agency (FAA) had under consideration the addition of section 60.28, "Avoidance of Disaster Areas," to Part 60 of the Civil Air Regulations. The rule would prohibit the flight of nonessential aircraft within disaster areas designated to encompass certain types of aircraft and train accidents, forest fires, earthquakes, floods and similar disasters. The reasons for the proposed amendment were outlined in detail in the draft release.

To ensure that the views of interested persons were fully considered, an informal conference was held in Washington, D.C., on November 14, 1961, prior to the issuance of the Notice of Proposed Rule Making. The majority of the user organizations were represented, as were agencies concerned with search and rescue activities and many news organizations. The comments received at the conference proved extremely valuable in development of the rule proposed in the draft release.

In commenting on the draft release, the news media groups stressed the time critical nature of news reporting. They recommended that the rule or the implementing FAA procedures provide for immediate recourse to higher authority in the event they are denied permission to operate at altitudes which they consider necessary. Denial of entry at altitudes being used by relief aircraft must be based on the objective determination of the person responsible for relief activities. His decision, based on a first-hand knowledge of the situation, should not be open to debate at that point. The Agency will, however, in the course of development of the implementing procedures, recommend guidelines as to when entry should be granted or denied. We will stress the responsibility which news organizations have to the public and will provide for all practicable assistance and cooperation.

One free-lance writer interpreted the proposal as requiring advance accreditation for news media aircraft and suggested that in-flight notification be permitted. The proposal did permit inflight notification and approval, as does the rule adopted herein. We also recognize that most news organizations secure aircraft on an immediate rental basis to cover news incidents. Therefore, all that the rule requires is carriage of accredited newsmen on a bona fide newsgathering mission.

The intent of the proposed rule was supported by most of the aircraft user groups which replied. However, some did recommend certain modification. The Air Transport

Association and the Helicopter Association of America were concerned that pilots might not have Notices to Airmen (NOTAMs) available in all cases and might inadvertently enter a disaster area. The latter group felt that the rule should specifically exempt those pilots who unknowingly enter a disaster area. They said that even though no penalties were assessed for such violations, it would be unfair even to cause the pilot technically to be in violation. The Agency recognizes the possibility of inadvertent entry but considers it undesirable to include these occurrences as exceptions to the rule. All the circumstances would, of course, be weighed in such an event. Certainly, proper discretion and prompt departure of the disaster area when the facts become known to the pilot would serve to mitigate his unintentional entry of the area.

The Aircraft Owners and Pilots Association contends that a disaster area should be established only when aerial relief operations are actually in progress or are imminent. AOPA considers that designation in other cases would be an unwarranted restriction of airspace. The draft release preamble stressed the collision potential that exists even though relief aircraft are not being used. Curiosity seekers often congregate over a disaster site and become a hazard to each other.

There was some comment that such a rule would be self-defeating since it would focus attention on an area which might otherwise go virtually unnoticed. Presently, most pilots voluntarily avoid disaster areas after an informational NOTAM has been issued. Their cooperation has made these voluntary procedures effective to a certain degree. While we recognize that attention will be focused on these disaster sites, we consider that the legal prohibition on entering the disaster area will prove to be a strong deterrent and will result in greater effectiveness.

Two forestry groups recommended that the ceiling of disaster areas be raised to as high as 2,000 feet above the essential air activity. They maintain that greater vertical separation from airborne fire fighting activities is required because of the reduction in visibility from the smoke. A pilot operating under such conditions would still be governed by the visibility minimums of Part 60. Therefore, we consider that the current regulations plus the rule adopted herein will amply prohibit imprudent operations in such areas.

The forestry groups also recommended that disaster areas be designated for all forest fires. The draft release preamble discussed the manner in which a disaster area would be established around a forest fire. That is, the Fire Air Officer would forward his recommendation to the appropriate FAA air route traffic control center which would then establish the area by NOTAM. Decision as to whether a disaster area is warranted would rest with the Fire Air Officer. An area could, therefore, be established around any forest fire where the circumstances justified.

Two comments discussed disasters on or near an airport having a control tower. One suggestion was that the control tower operator be given authority to impose conditions comparable to those proposed in the rule even though a disaster area was not designated. The particular circumstances would dictate whether a disaster area should be created. However, the specific authority is not required in this rule because basically the same results would be obtained through the use of section 60.18, "Operation on and in the Vicinity of an Airport." Section 60.18, among other things, requires aircraft to avoid the five-mile airport traffic area unless operating to or from an airport within the area, requires two-way radio communications with federally operated control towers, imposes a speed limit, and establishes a left-hand traffic pattern direction for fixed-wing aircraft. The control tower can authorize deviation from any of these requirements. Even if the accident should occur on the airport itself, the airport would be kept open to the extent practicable.

Two comments suggested that the Federal Aviation Agency immediately send traffic controllers to the disaster scene to provide air traffic control service. This course has been studied, however, personnel and equipment considerations presently make this impractical in most instances. The Federal Aviation Agency has recently entered into a Memorandum of Agreement entitled, "Airspace Control in Search and Rescue and Disaster Relief Areas" with the Department of Defense, the United States Coast Guard, the Forest Service, and the Office of Emergency Planning. The Agreement sets forth certain actions which will be taken by the signatories in development of the over-all plan. The Federal Aviation Agency has agreed to determine the feasibility of providing airport

traffic control personnel and equipment to designated operating bases when requested by appropriate disaster control authorities.

Amendment added section 60.28.

Rescission of SR–438

Adopted: January 1, 1963
Effective: January 11, 1963
Published: January 11, 1963
(28 F.R. 306)

By Special Civil Air Regulations No. SR–438 (25 F.R. 1764), effective April 4, 1960, special airport traffic pattern rules were established for flight operations conducted within five miles of the Los Angeles International Airport at altitudes extending up to, but not including, 2,000 feet above the surface. SR–438 also established certain traffic pattern rules for the Hughes, Santa Monica, and Hawthorne Airports. It was promulgated to enhance the safety of flight in the Los Angeles area and to provide a measure of relief from aircraft noise to persons on the ground, pending the adoption of a rule of national application for the same purposes.

On September 22, 1961, Amendment 60–24 (26 F.R. 9069), effective December 26, 1961, was adopted. By this action, section 60.18 (Part 60 of the Civil Air Regulations) was amended to establish certain air traffic rules which were designed to standardize flight procedures at controlled airports and, to the extent practicable, provide for a uniform application of traffic pattern rules. Much of the substance of SR–438 was incorporated in these rules. In addition, the amended section 60.18 authorizes the development of mandatory local preferential runway procedures, such as those presently specified in SR–438. Therefore, section 60.18 renders superfluous and unnecessary much of the regulatory content of SR–438.

Provisions of SR–438 not contained in section 60.18 pertain to the directions from which to enter the traffic patterns of those airports located within the Los Angeles airport traffic pattern area. Airport traffic pattern area was a term applied to the Los Angeles terminal area which delineated that airspace in which the special rules of SR–438 were applicable. Amendment 60–24 created the airport traffic area which includes airspace within five statute miles of every controlled airport, extending up to but not including 2,000 feet above the surface. The airport traffic area which now surrounds each of the airports regulated by SR–438 is a change in concept and has substantially altered the configuration of designated traffic areas in the greater Los Angeles terminal area, so that the traffic pattern entry procedures specified in the special rule are ambiguous. As a result, redefinition would be required if other means of providing pilots with this information were not available. However, the communications provisions of section 60.18 require pilots to maintain two-way communications with the airport traffic control tower while operating in the respective airport traffic areas, and will provide adequate means of transmitting this information to any pilots unfamiliar wtih entry procedures. Accordingly, retention of the entry procedures specified in SR–438 is no longer necessary. Any traffic pattern altitudes not specified in section 60.18 can also be provided in a similar manner.

Since this action eliminates duplicative requirements and imposes no additional burden upon any person, compliance with the notice, public procedure and effective date requirements of the Administrative Procedure Act is unnecessary.

Rescinded SR–438.

Amendment 60-31

Operation Rules for Unmanned Rockets

Adopted: January 7, 1963
Effective: March 14, 1963
Published: January 11, 1963
(28 F.R. 305)

On June 7, 1962, notice was given in Draft Release 62-26 (27 F.R. 5402) that the Federal Aviation Agency had under consideration a proposal to amend Part 48 of the Civil Air Regulations to include regulations governing the operation of rockets. The notice also proposed to amend the scope of Part 60 to exclude rockets from the air traffic rules contained therein.

Regulatory action, as proposed, is required to provide the necessary compatibility between rocket operations and other airspace operations. It is also necessary to provide for the protection of persons and property on the ground that are not associated with such rocket activities.

The comments received in response to the draft release generally concurred with the concept and operating limitations. However, some of the comments contained suggestions to modify the proposal in a way which would result in stricter requirements for certain operations. On the other hand, others contended that the Agency was not lenient enough.

Apprehension was expressed in one comment because no limitation as to type was placed on the four ounces of propellant used in model rockets. It was contended that four ounces of nitroglycerin could be considered a likely propellant. Although the use of such a high explosive is highly improbable, the rule being adopted will limit the type of propellant to no more than four ounces of a "slow-burning" propellant.

The Air Line Pilots Association (ALPA) supported the operating limitation that would require the regulated rockets to be operated more than five miles from an airport boundary. However, in the opinion of ALPA, the Agency had created a variance by not imposing this same limitation on the exempted model rockets. The concern of ALPA is appreciated, however, these model rockets are not considered to be a hazard due to their limited size, weight, construction and operational capability. Therefore, no change is made in this portion of the final rule.

Two comments contended that the exemption granted to operations under a written agreement was unnecessary. They stated that section 48.2 of the existing regulation, concerning waivers to the Part, adequately provides for written agreements. We have recognized this contention and deleted the redundant provision which exempts operations conducted under such a written agreement. In doing so, however, we wish to point out certain facts and make certain assurances. Both of the previous draft releases on rockets, Nos. 61-4 and 62-26, excluded rocket operations conducted under a written agreement reached between the operator and the Federal Aviation Agency. This exclusion was intended to encompass the more complicated and large-scale sophisticated programs, such as those of the Department of Defense and the National Aeronautics and Space Administration. In addition, Draft Release No. 62-26 excluded rocket operations in restricted areas—except for the requirement to stay at least 1,500 feet from persons not associated with the operation. As a matter of fact, all of these large-scale programs in the United States are conducted entirely within restricted areas under written agreements. Therefore, even though the proposed rules were directed to all rocket operations, their effect was to principally control amateur rocketry. Deletion of the written agreement provision will not alter this situation. Those agencies operating in restricted areas will still be exempt from the rules proposed herein, with the one exception previously noted regarding distance from persons, and their current Letters of Agreement will remain in effect as waivers to the Part and as conditions attached to the waiver. Any later operations, whether amateur or governmental, requiring deviation from the regulations will be processed as a Certificate of Waiver.

One of the major points that was discussed in the preamble of the draft release was an explanation of the term "controlled airspace." This was considered necessary in order to apprise all rocket operators of the various segments and areas of controlled airspace

from which the operational limitations required avoidance. In supporting this avoidance limitation, the Air Transport Association recommended that the rule clearly state that the Continental Control Area (airspace at and above 14,500 feet mean sea level over the 48 contiguous States and the District of Columbia) is controlled airspace and therefore must be avoided. The merit of this recommendation is recognized. We intend to go further, however, and incorporate a complete explanation of the various types of controlled airspace in the newly adopted Agency Advisory Circular System. This system has been developed to provide the public with nonregulatory guidance and information material that is supplemental to the regulation. Complete knowledge of the types of controlled airspace should provide for a greater understanding and ease of application of the regulation.

Certain exceptions were taken to the provision requiring avoidance of controlled airspace. Several of the comments indicated that the limitation would be unnecessarily restrictive and would create a considerable requirement for the issuance of waivers. This possibility is recognized, especially for operations east of the Mississippi River where uncontrolled airspace is at a premium. However, we intend to closely monitor this program and if it appears that an unrealistic burden is being placed on such operation, modifications will be considered.

The majority of comments concurred with the principal objective of the proposal, that is, to direct rocket operations into areas of minimum aircraft operations. The limitation that would require rockets to be operated more than five miles from an airport boundary did, however, generate a degree of interest. One of the two comments that took exception to this limitation suggested that an airport closed to all but rocket operations conceivably could be the best possible location. The other comment contended the limitation appeared unwise since rocket activity under controlled conditions at a small airport probably would be more desirable because the activity would be under direct observation of local pilots. The merit of these arguments is appreciated; however, we believe the safety of unknowing transient pilots could be jeopardized. Since modification in the manner suggested, even at less active airports, would nullify one of the major safety objectives by allowing potentially hazardous objects in areas of more concentrated air traffic, no change is made in this operating limitation.

The weather requirements of the proposal were generally supported. However, the Department of the Army commented that the weather limits imposed would preclude rocket operations in other than perfect weather conditions. Experience has indicated that the majority of amateur rocketeers desire to operate a rocket only under ideal weather conditions in order to visually judge and observe its performance and impact, thereby facilitating recovery of the rocket for re-use or subsequent operation. Therefore, these limitations are not considered to impose an unreasonable burden. One comment recommended radar surveillance to allow operating in reduced weather conditions. This is a provision that would be considered in any request for a Certificate of Waiver. Other than a minor modification of wording regarding visibility at the altitude at which the rocket is operated, no change is made in the weather requirements.

Amendment revised section 60.1

Amendment 60–32

Operation at Airports

Adopted: January 11, 1963
Effective: January 17, 1963
Published: January 17, 1963
(28 F.R. 443)

Civil Air Regulations (CAR) Amendment 60–24, effective December 26, 1961 (26 F.R. 9069), established the requirement currently contained in section 60.18(b)(6)(ii) that fixed-wing aircraft, approaching to land on a runway served by visual glide slope devices, be flown so as to remain at or above the glide slope until arrival at the runway threshold. Since the adoption of the amendment, experience has indicated that the

requirement is too restrictive and, in certain cases, might have an adverse effect on the safety of flight. Federal Aviation Agency studies, as well as comments received from the Air Transport Association and the Air Line Pilots Association, indicate that by remaining at or above the glide slope until reaching the runway threshold, aircraft may be forced to either descend at an excessive rate in order to effectively utilize the runway, or to touch down at a point considerably farther down the runway than is desirable, depending upon the variables of wind, temperature and aircraft type.

Safety of flight is of paramount consideration, and the Agency, in discharging its regulatory responsibility, is responsive to amendment of its regulations for this reason. Accordingly, section 60.18(b)(6)(ii) is being amended so as to permit flight below the visual glide slope during the final stages of an approach to landing where noise abatement ceases to be a prime consideration. This amendment will permit the maneuvering necessary to touch down near the runway threshold without significant adverse effect upon the basic intent of the rule.

Inasmuch as this amendment relaxes an existing requirement, compliance with the notice, public procedure and effective date requirements of the Administrative Procedure Act is unnecessary.

Amendment revised section 60.18.

U. S. GOVERNMENT PRINTING OFFICE : 1963 O - 675664