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UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY
Washington 25, D. C.

October 7, 1960

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 60-17

SUBJECT: Airport Traffic Area Rules

The Bureau of Air Traffic Management has under consideration a proposal which would establish revised regulations governing the flight operations of all aircraft operating on and in the vicinity of airports. The reasons therefor are set forth in the explanatory statement of the attached proposal which is being published in the Federal Register as a notice of proposed rule making.

The Agency desires that all persons who will be affected by the requirements of this proposal be fully informed as to its effect upon them and is therefore circulating copies in order to afford interested persons ample opportunity to submit comments as they may desire.

Because of the large number of comments which we anticipate receiving in response to this draft release, we will be unable to acknowledge receipt of each reply. However, you may be assured that all comments will be given careful consideration.

It should be noted that comments must be submitted in duplicate to the Docket Section of the Federal Aviation Agency, Room B-316, 1711 New York Avenue, N. W., Washington 25, D. C., prior to December 15 , 1960.

(Per 60-17A = Dec 30, 1960)

John H. Wilson

For Director, Bureau of Air Traffic Management

FEDERAL AVIATION AGENCY

BUREAU OF AIR TRAFFIC MANAGEMENT

[14 CFR 60]

[Reg. Docket No. 531 ; Draft Release 60-17]

NOTICE OF PROPOSED RULE MAKING

Airport Traffic Area Rules

Pursuant to the authority delegated to me by the Administrator (14 CFR Part 405), notice is hereby given that the Federal Aviation Agency has under consideration a proposal to amend the Civil Air Regulations, Part 60, Section 60.18, as hereinafter set forth.

Interested persons may participate in the making of the proposed rule by submitting such written data, views or arguments as they may desire. Communications should be submitted in duplicate to the Docket Section of the Federal Aviation Agency, Room B-316, 1711 New York Avenue, N. W., Washington 25, D. C. All communications received prior to December 15, 1960, will be considered by the Administrator before taking action upon the proposed rule. The proposals contained in this notice may be changed in the light of comments received. All comments submitted will be available for examination by interested persons in the Docket Section when the prescribed date for the return of comments has

expired. Because of the large number of comments which we anticipate receiving in response to this draft release, we will be unable to acknowledge receipt of each reply.

The proposed revision to Section 60.18 "Operation On and In the Vicinity of an Airport" as outlined herein, would establish several significant additional rules and requirements for the operation of aircraft at those airports where an airport traffic control tower is in operation.

One of the principal objectives of this proposal is the standardization of controlled airport traffic flight procedures. To the extent practicable, the proposal provides for the uniform application of traffic pattern rules which will enhance both the safety of airport flight operations and the abatement of the aircraft noise problem as it affects adjacent communities.

The adoption of the provisions proposed herein would result in discontinuance of high density airport traffic zones. The current requirements of high density airport traffic zones regarding specific limitations of airspeeds and two-way radio would be expanded so as to be applicable at most airports where an airport traffic control tower is in operation.

The controlled airport rules proposed herein would create an airport traffic area around each airport at which an airport traffic control tower is in operation. The need for a standard

configuration of an area specifically established for airport traffic is underscored by the number of near mid-air collision incidents which have resulted from the interference caused by the intrusion of an en route aircraft operating into and through airport traffic patterns. The airport traffic area would include all the airspace below 2,000 feet above the surface within a radius of 5 statute miles of the center of the controlled airport. All aircraft being operated en route that are not destined for a landing at an airport within an airport traffic area would be obliged to avoid the area or contact the control tower for authorization to operate through the area. At those airports where a control tower is operated on a part-time basis, the airport traffic area at that airport shall apply only during the hours the control tower is in operation.

These proposed rules outlined herein would also establish a requirement for two-way radio equipment for the operation of all aircraft at those controlled airports where the nature and/or volume of air traffic are such that the rapid exchange of intelligence between all pilots and the control tower is essential to the maintenance of air safety in the airport traffic area. Because the nature of the airport traffic flow

at military airports is typically unique, complex and oftentimes designed to accommodate unusually high-speed flight operations, the requirement for two-way radio at these airports is considered essential. Each airport traffic control tower established by this Agency is likewise established to provide airport traffic control service only at those airports where the traffic volume exceeds a given amount.

The need for a two-way radio requirement is directly related to the need for the added safety which an airport traffic control tower can provide. The extent of effectiveness of an airport traffic control tower is largely dependent on the extent to which instantaneous and continuous radio communication is utilized between the tower and all pilots operating at such airport.

The distinct benefits derived from two-way radio are recognized by a majority of pilots who have occasion to operate to or from controlled airports and the use of two-way radio is becoming increasingly more prevalent. However, the extent to which normal controlled airport operations can be disrupted by aircraft not so equipped has a direct and adverse effect on both the safety and efficiency of the over-all airport operations. The standards of safety which

are provided the majority of controlled airport users through the use of radio equipment are seriously diminished when the normal, orderly flow of air traffic must be interrupted and reorganized to accommodate the arrival of aircraft without radio equipment. Since the approach procedure to be used by a pilot of an arriving aircraft without radio is not known, the organization of other air traffic must oftentimes be delayed for considerable periods of time. Under calm wind conditions when multiple runways are being used for take-offs and landings, it is even difficult to predict the direction of landing which might be used by such an aircraft.

The continued reliance on the use of light signals directed toward an aircraft from a control tower as a primary means of providing airport traffic control cannot be sustained if appropriate standards of airport safety and airport efficiency are to be maintained. If an airport has a traffic volume which warrants the establishment of an airport traffic control tower by the FAA, the degree of safety which that airport requires cannot be satisfied by a light-signal system of airport traffic control.

When the various and substantial amounts of complex ground equipment needed to operate a tower have been provided by the FAA, the potential benefits in safety which could be expected from such investments of equipment are negated by the operation of aircraft that are not radio equipped. In order to provide for the increased effectiveness of airport traffic control and the corresponding improvement in the level of over-all airport safety, it is proposed, herein, to require two-way radio communications of all aircraft operating to or from airports where an FAA or military traffic control tower is in operation. A provision is included in this proposed requirement which would allow an aircraft to land or take off at such an airport provided prior authorization of the control tower is obtained. This provision is included to accommodate particular flight operational requirements for which such special exceptions can be justified.

While the nature and/or volume of air traffic that typically operates at an airport served by an FAA or military tower is common to all such airports, the same does not apply to those airports where a control tower is operated by non-Federal Authorities. Since a control tower can be established and operated by non-Federal Authorities at

airports where the traffic may be light and of a regular or routine nature, it is not intended that the two-way radio requirement be applicable at such airports.

It is proposed, however, that the two-way radio communications requirement would be applicable to those aircraft which have radio equipment capable of communicating with the non-Federal control tower. In the same regards, when operating an aircraft with "receiver-only" radio equipment capable of receiving messages from such control towers, the proposed rules would require that a continuous listening watch be maintained while operating within the airport traffic area.

The proposed rule also revises the requirements to obtain an air traffic control clearance prior to performing certain maneuvers when operating on an airport where an airport traffic control tower is in operation. The principal change is that an appropriate clearance must be obtained prior to take-off, landing, or taxiing on a runway. An appropriate clearance would be obtained by two-way radio communications at those airports where such communications are required. Similarly, an appropriate clearance would be obtained by visual means (light signals) at those locations

where two-way radio communications are not required or where prior authorization has been obtained to operate within the airport traffic area without two-way radio communications.

The requirement to obtain an air traffic control clearance prior to landing, take-off, or taxiing on a runway at airports where an airport traffic control tower is in operation is considered essential to assure that air traffic control service is exercised to the fullest extent.

Certain provisions are also included which are intended to provide for the establishment of detailed noise abatement operating procedures by the Federal Aviation Agency on an individual and local airport basis. These provisions would provide for a uniform application of certain operating rules which can be applied on a national basis but would permit the development, implementation and modification of detailed procedures to more localized Federal Aviation Agency determinations.

While the Agency has promulgated and proposed certain Special Civil Air Regulations which prescribe airport operating rules for specific airports, it is believed that greater flexibility and over-all effectiveness could be achieved in noise abatement effort if detailed operating

procedures for particular airports were developed and implemented on a local basis. This will also provide for a more ready adaption of local procedures to changing requirements and for the earlier implementation of improved noise abatement flight techniques.

The detailed operating procedures which would be developed by the Federal Aviation Agency on a local basis might include a system of preferential runways to be used by large aircraft for both take-offs and landings. Turns or altitude requirements may be specified for use after take-off from certain runways and these local procedures might require certain routes to be followed while departing or entering the airport traffic area.

It is recognized that the itinerant pilot may not be acquainted with such local procedures and cannot be expected to comply with local airport traffic area entry procedures. The rules herein proposed would provide that such a pilot would enter a normal left-hand traffic flow and continue in a left-hand traffic pattern unless advised otherwise by the tower. Pilots intending to land at a controlled airport who have landed at or taken off from such airport within the

preceding 30 days would be obliged to conform to the local procedures of that airport. Every pilot of an aircraft departing from such an airport would be obliged to conform to all departure procedures.

These local Federal Aviation Agency airport procedures will be developed in normal coordination activities with persons interested and affected by such procedures and distribution of the procedures will include all who operate at such airports on a scheduled basis. Additionally, the procedures will be displayed in convenient and conspicuous places at the airport for ready reference.

The rules proposed herein for uniform application at all controlled airports include specific area entry and traffic pattern altitudes, climb after take-off procedures and final approach requirements.

The need for a standard traffic pattern for uncontrolled airports is also recognized and a draft proposal is being developed which would establish uniform traffic pattern flight procedures at most uncontrolled airports. Additionally, this future proposal would provide for the establishment of "special" traffic patterns at those uncontrolled airports where the standard pattern cannot be applied.

The uncontrolled airport proposal herein contains no substantive changes over those rules that now exist in Civil Air Regulations, Section 60.18. This proposal does contain, however, additional requirements for operation at those uncontrolled airports where a Federal Aviation Agency Flight Service Station is located. The rules propose to establish a firm requirement for the use of two-way radio equipment when such is available, at each of those airports where a Flight Service Station is in operation. Air carrier company and UNICOM radio facilities are often located at the same airport served by a Flight Service Station and the use of these different separate facilities compounds and often frustrates the efforts of all involved to provide an effective airport advisory service.

To assure that the potential advantages in air safety that are inherent in a centralized source of airport traffic advisory are made available to the pilots of all aircraft with radio equipment, it is proposed herein that all pilots of aircraft, equipped with functioning two-way radio equipment and operating to or from an airport at which a Flight Service Station is located, will maintain two-way communications with such station when within 5 statute miles

of the airport. Similarly, the proposal will require the pilots of all aircraft, equipped with a functioning radio receiver, to maintain a listening watch on the appropriate frequency when within 5 statute miles of the airport.

In view of the foregoing, it is proposed to amend Sections 60.18 and 60.60 as follows:

1. By amending Section 60.18 to read as follows:

§60.18 Operation On and In the Vicinity of An Airport.

Aircraft shall be operated on and in the vicinity of an airport in accordance with the following rules:

(a) General Rules.

(1) Avoidance of Airport Traffic Areas. Aircraft shall not be flown within an airport traffic area except:

(i) For landing or take-off at the airport upon which the airport traffic area is centered, or

(ii) For landing or take-off from other airports located within the airport traffic area, or

(iii) When otherwise authorized by the airport traffic control tower located at the airport upon which the airport traffic area is centered.

(2) Speed. No person shall operate an aircraft within an airport traffic area at a speed in excess of 180 mph

or 156 knots indicated airspeed unless operational limitations for a particular aircraft require greater airspeeds, in which case the aircraft shall not be flown in excess of the minimum speed consistent with the safe operational limitations of the aircraft.

(b) Controlled Airport. Aircraft being operated to or from and on the surface of an airport at which an airport traffic control tower is located shall be operated in accordance with the following rules unless otherwise authorized by the airport traffic control tower at that airport:

(1) Communications. During the hours the airport traffic control tower is in operation the following radio communication requirements shall apply:

(i) United States Government Operated Control Towers. When operating an aircraft to or from an airport at which an airport traffic control tower is operated by the United States Government, two-way radio communications shall be maintained with that control tower while operating within the airport traffic area.

(ii) Other Control Towers. When operating an aircraft to or from an airport at which an airport traffic control tower is operated by an agency other than the United States Government, pilots of aircraft having radio equipment permitting two-way radio communications with the airport

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

(2) Clearances.

(i) Take-off, Landing or Taxi Clearance. A clearance shall be obtained prior to take-off, landing or taxiing on a runway. Approval to taxi "to" a runway shall not constitute a clearance to taxi "on" that runway.

(ii) When operating an aircraft not having functioning radio equipment at those airports where two-way radio is not required or where prior authorization has been obtained, pilots shall maintain visual contact with the control tower while operating within the airport traffic area of that airport and a clearance (light signal) shall be obtained prior to taxiing on a runway and prior to take-off and landing.

(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 Entry Altitudes. Except when the VFR distance-from-cloud criteria requires otherwise and where terrain and obstacles permit, fixed-wing aircraft shall enter the airport traffic area at the following altitudes:

(i) Fast Aircraft. Aircraft that will be operated within the airport traffic pattern, exclusive of the final approach, at speeds in excess of 120 mph (105 knots) shall be flown so as to enter the airport traffic area at an altitude of at least 1,500 feet above the surface.

(ii) Slow Aircraft. Aircraft that will be operated within the airport traffic pattern, exclusive of the final approach, at speeds of 120 mph (105 knots) or less shall be flown so as to enter the airport traffic area at an altitude of at least 1,000 feet above the surface.

(4) Traffic Pattern Entry Procedures. Pilots of fixed-wing aircraft operating to a controlled airport who have landed at or taken off from such airport within the preceding 30 days shall conform to all traffic pattern entry procedures, which may include a preferential runway system, established by the Federal Aviation Agency for that airport. Other pilots of fixed-wing aircraft, while approaching to land, shall follow a left-hand traffic pattern unless

otherwise advised by the airport traffic control tower of that airport. When a preferential landing runway, applicable to the type of aircraft, is assigned by the airport traffic control tower in accordance with local traffic pattern procedures and the pilot determines that use of such runway is unsafe for the operation of his aircraft, he may use another runway of his choice, subject to other traffic. If a pilot elects to use a runway other than the preferential runway, a written report of the reasons therefor shall be forwarded within 48 hours to the Chief, Flight Standards Division, of the nearest FAA Regional Office.

(5) Traffic Pattern Altitudes. Except when the VFR distance-from-cloud criteria requires otherwise and where terrain and obstacles permit, fixed-wing aircraft shall be operated in accordance with the following:

(i) Fast Aircraft. Aircraft that will be operated within the airport traffic pattern, exclusive of the final approach, at speeds in excess of 120 mph (105 knots) shall be flown so as to maintain an altitude of at least 1,500 feet above the surface while operating within the airport traffic pattern until maneuvering for a safe landing requires further descent.

(ii) Slow Aircraft. Aircraft that will be operated within the airport traffic pattern, exclusive of the final approach, at speeds of 120 mph (105 knots) or less shall be flown so as to maintain an altitude between 1,000 and 800 feet above the surface while operating within the airport traffic pattern until maneuvering for a safe landing requires further descent.

(6) Helicopter Entry. Pilots of helicopters operating to a controlled airport who have landed at or taken off from such airport within the preceding 30 days shall conform to the helicopter traffic pattern procedures established by the Federal Aviation Agency for that airport. Other helicopters, unless the VFR distance-from-cloud criteria requires otherwise, and where terrain and obstacles permit, shall be flown so as to enter the airport traffic area below 1,000 feet but not less than 800 feet above the surface. After entry an altitude between 1,000 and 800 feet shall be maintained as long as practicable and the approach to land shall be made in a manner which avoids the flow of fixed-wing aircraft.

(7) 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 requires 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 other glide slope devices, fixed-wing aircraft capable of using these devices shall be flown so as to remain at or above glide slope until arrival at the runway threshold.

(8) Departures. Aircraft taking off from a controlled airport shall be operated as follows:

(i) Pilots shall, prior to departure, familiarize themselves with and conform to any local traffic pattern departure procedures, which may include a preferential runway system for large aircraft, established by the Federal Aviation Agency for that airport. When a preferential take-off runway is assigned by the airport traffic control

tower in accordance with local traffic pattern departure procedures and the pilot determines that such runway is unsafe for the operation of his aircraft, he may use another runway of his choice. If a pilot elects to use a runway other than the preferential runway, a written report of the reasons therefor shall be forwarded within 48 hours to the Chief, Flight Standards Division, of the nearest FAA Regional Office.

(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 Administrator may specify a different rate of climb for a particular type of aircraft when he finds that greater advantage in noise reduction can thereby be achieved.

(iii) When departure procedures for a particular airport are not specified for helicopters and unless otherwise required by the VFR distance-from-cloud criteria, such aircraft shall be flown so that a climb is made as rapidly as practicable to at least 800 feet above the surface.

(c) Uncontrolled Airports. Aircraft being operated to or from an airport where an airport traffic control tower is not in operation 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 shall be made to the left unless the airport displays light signals or standard visual markings which have meanings approved by the Administrator 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. Aircraft operating from an uncontrolled airport shall conform to the traffic patterns established for that airport by appropriate authority.

(3) Communications. Aircraft being operated to or from an airport not served by a control tower but at which a Federal Aviation Agency Flight Service Station is located 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 Rule 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.

2. By amending Section 60.60 to add the following definitions:

Airport Traffic Area. An airport traffic area is defined as that airspace within a 5 statute mile horizontal radius from the geographical center of an airport at which an operational airport traffic control tower is located and extending upwards from the surface to, but not including 2,000 feet above the surface.

Large Aircraft. Aircraft of 12,500 pounds or more maximum certificated take-off weight.

This amendment is proposed under the authority of Sections 313(a) and 307 of the Federal Aviation Act of 1958 (72 Stat. 752, 749; 49 U. S. C. 1354, 1348).

For John H. Wilson
Director, Bureau of Air Traffic Management

Issued in Washington, D. C., on Oct. 7, 1960