## SPECIAL CIVIL AIR REGULATION NO. SR-442

Effective: October 15, 1960 Issued: August 31, 1960

## New York International Airport Traffic Area Rules

Draft Release No. 60-10 (25 F.R. 4202), dated May 5, 1960, gave public notice that the Federal Aviation Agency had under consideration the adoption of a Special Civil Air Regulation which would designate certain airspace around the New York International Airport as an airport traffic area and establish special air traffic rules applicable to this area.

A major purpose of this regulation is to reduce the aircraft noise disturbance to persons on the ground, recognizing that all aircraft noise cannot be climinated and that safety of aircraft must be a primary consideration. The most direct solutions presently feasible include rearrangement of local traffic flow, use of prescribed preferential runways and traffic rules to establish the maximum altitudes of flight near airports consistent with safe landings and take-offs.

The degree to which aircraft noise may be reduced by regulating flight operations is limited to a great extent by the requirements of flight safety. The Agency must weigh all safety factors and consider the public interest with respect to a requirement for adequate air transportation against the problems which arise from aircraft noise in affected areas. For example, the Agency cannot prescribe regulations, simply to achieve some noise abatement, which would require an aircraft approaching to land to maintain a high altitude so close to the point of landing as to require descent at an angle too steep for safety.

Suggestions were made to prohibit the operation of jet aircraft during nighttime hours and to require the offloading of passengers and cargo to permit use of preferential runways. Such curtailment is not compatible with the critical need in the New York area for air transportation services. Moreover, bearing in mind that this is an initial attempt to provide noise relief in the New York area by regulation, there has not been sufficient experience for determining whether the noise benefits which might be derived would justify the resulting penalties upon the air transportation services required.

Although one of the primary objectives of this special regulation is to reduce aircraft noise, it is recognized that the preferential runway system, revised routings and minimum descent angles and altitudes set forth in this regulation will not completely eliminate the problem.

In developing a regulatory policy to resolve the problem of aircraft noise, the Agency has adopted certain basic concepts, previously incorporated in regulatory form in Special Civil Air Regulation SR-438, Los Angeles International Airport Traffic Pattern Area Rules. These concepts include the establishment of an airport traffic area for 5 statute miles around an airport within which special operating rules would apply. Such rules in turn would provide for use of preferential runways, prescribe altitudes for flight within the area

which would reduce noise, require entry and departure in specified directions where possible, and exclude en route traffic from the area to the maximum extent. A requirement for radio communication between aircraft and the controlling facility is also included as essential to the safe and expeditious movement of traffic within the area.

The primary source of aircraft noise is the large jet transport aircraft. The Agency currently requires that such aircraft be equipped with engine noise suppressors which effect a significant reduction of engine noise. Further studies of jet noise suppression methods are under way in an effort to obtain additional reduction of aircraft noise. Development and use of ground engine mufflers may result in the reduction of noise during the period of ground engine run-up.

In addition to those comments discussing the general aspects of the noise problem there were also a large number of comments relative to the operational contents of the proposal. To promote clarity and continuity, these comments will be considered jointly as portions of each apply to the sequence of the rule.

The term "airport traffic pattern area" appearing in Draft Release 60-10 has been replaced by the term "airport traffic area" in both the preamble and the rule adopted herein. This change was accomplished in order to provide a clear distinction between the airport traffic area which encompasses airspace within a 5 statute mile radius of the airport, and the airport traffic pattern which refers to the flow of traffic operating on and in the vicinity of an airport during specified wind conditions. In addition, the description of the horizontal radius of the airport traffic area has been revised by adding the word "statute" to make it clear that the measurement is not based upon nautical miles.

Comments received from the Air Line Pilots Association (ALPA) recommended raising the ceiling of the airport traffic area to 3,000 feet to avoid the mingling of VFR/IFR air traffic in the vicinity of the airport. general aviation groups recommended the establishment of a corridor to permit VFR traffic to fly through the area. Each of these proposals has been carefully considered and it has been concluded that one counterbalances the other. While it is considered desirable to segregate en route traffic from terminal traffic, such action should be taken in a manner imposing no undue burden upon either type of operation. In a large measure, the rule proposed herein reduces the probability of incidents resulting from the intrusion of an en route aircraft At the same time, it permits en route into or through the airport traffic area. aircraft to proceed over the airport traffic area at an altitude compatible with the operational characteristics of such aircraft. The establishment of an en route VFR corridor is not considered feasible since such action would derogate the benefits intended by the rule. Moreover, in this particular case, it does not appear that an appreciable hardship is imposed upon en route traffic due to their requirement to comply with Section 60.17 of Part 60.

The proposed rule was designed to prohibit all flight training activities within the New York International Airport Traffic Area with the exception of necessary airport qualification flights. It was not intended to prohibit pilots who intended to conduct training activities outside such area from utilizing the airport as a base for such operations. The rule has been modified accordingly.

The rule, as adopted herein, will require that all large aircraft be operated at altitudes of 1,500 feet or more except when maneuvering for landing or in flight following departures. Draft Release No. 60-10 proposed that small air-

crait be required to enter the airport trame area between the attitudes of 1,000 and 1,200 feet and, after entry, operate at altitudes between 800 and 1,000 feet until maneuvering for a landing requires otherwise. Several of the comments recommended that the traffic area entry and operating altitudes be revised to require all aircraft to operate at or above 2,000 feet except as required for take-off and landing, while other comments voiced objection to the stipulation of a maximum operating altitude for small gircraft. A basic concept of aircraft separation by reason of performance is practically expressed in the rule by the segregation of large and small aircraft operations into different altitude Inherent separation, as provided by this rule, is designed to reduce the probability of mid-air collision and it is, therefore, deemed advisable to require its retention. In addition to the benefits accruing to safety, the requirement that small, less noisy aircraft operate in the lower strata of airspace and the larger and more noisy aircraft at the higher altitudes will serve to relieve the problems resulting from aircraft noise. In recognition of problems involved in flight by small aircraft over congested areas and in the interest of noise reduction, the altitude requirements for small aircraft have been modified to permit their entry at 1,200 feet or higher and to require that flight within the area be conducted between 1,000 and 1,200 feet until maneuvering for landing requires further descent.

The provisions of the rule adopted herein relative to the maintenance of an altitude at or above the glide slope angle are designed to provide a measure of relief from aircraft noise to those areas underlying the final approach path. It was not the intent of the proposal that compliance with the regulation for the purpose of noise relief should be carried to the point of compromising safety. For clarification, the final rule states that requirements for flight at or above the glide slope are applicable only when the VFR distance-from-cloud criteria will permit.

The Agency recognizes the validity of those comments suggesting that, under certain conditions, a climb to 1,500 feet, as rapidly as practicable, will generate more noise than a climb under reduced power. Also, it recognizes that a turn executed as soon after take-off as safety will permit may alleviate noise in certain areas. The rule adopted herein is designed to provide the necessary flexibility to accommodate such techniques. The Administrator may authorize a slower rate of climb in the interest of noise abatement, either by directive or through authorizations by the airport traffic control tower.

Several comments recommended elimination of the restriction prohibiting the use of runways 4L, 4R, 13L and 31R for take-off by turbojet aircraft, contending that flight safety and efficiency of operation require the availability of these runways. Prohibition of the use of these runways is a measure designed to reduce aircraft noise and the action was taken only after due consideration of safety requirements. The Agency realizes that under certain conditions, it may be necessary to utilize these runways; therefore, this rule provides the New York International Airport Traffic Control Tower the necessary flexibility to authorize deviations when necessary. However, it is emphasized that such authority will be used sparingly.

Several comments urged revision of the proposed rule to distinguish between the "heavy" turbojet (for example, 150,000 or more pounds maximum certificated take-off weight) and the "light" turbojet aircraft. These comments contended that "light" turbojet aircraft, with higher performance capability and a lesser aircraft noise output, would not significantly contribute to the

noise problem in critical areas regardless of the runway used for take-off. Although recognizing the logic of some of these arguments, it has been decided that modification of the rule is not currently warranted since the rule provides differentiation at the discretion of ATC authorities.

Many and varied recommendations were received relative to the system of preferential runways. After carefully considering these comments, the system has been revised to the maximum extent possible considering the requirements of safety and of noise abatement. Some questions were raised regarding the report required from the pilot of a large fixed-wing aircraft who, for safety reasons, elects to use a runway other than the preferential or alternate runway assigned by air traffic control. It is not intended that this rule, in any way, abrogate the authority and responsibility of the pilot in command to assure the safe operation of his aircraft. It is intended that such reports of deviation from the preferential runway system be prepared either by the pilot or by a responsible official of the company concerned and that the report be in transit to the appropriate FAA Regional Office within the prescribed time. Inasmuch as provision is made to permit filing of such reports by company officials in lieu of the pilot, it is not considered necessary to revise the 48-hour time limit provisions.

This rule provides that helicopters shall be operated as authorized by the New York International Airport Traffic Control Tower. Such authorization may be contained in air traffic control clearances or in formal agreements between the helicopter operator and the control tower.

In consideration of the foregoing, the following Special Civil Air Regulation is hereby adopted to become effective October 15, 1960.

## NEW YORK INTERNATIONAL AIRPORT TRAFFIC AREA RULES

Scope and applicability. All aircraft operating within the New York International Airport Traffic Area shall be operated in accordance with the following rules unless otherwise authorized by the New York International Airport Traffic Control Tower. As used in this regulation, the New York International Airport Traffic Area shall include the airspace within a five statute mile horizontal radius from the geographical center of that airport and extending upward from the surface to but not including, 2,000 feet above the surface. Additionally, the term "large aircraft," as used herein, shall mean those aircraft of 12,500 or more pounds maximum certificated take-off weight. The term "small aircraft" shall mean all others.

- (a) General rules.
- (1) Avoidance of Airport Traffic Area. En route aircraft shall not be flown within the New York International Airport Traffic Area, and aircraft while engaged in training flights shall not be flown within such area except to the extent necessary for take-off from and landing at that airport. This restriction shall not apply to required airport qualification flights.
- (2) Communications. Two-way radio communications shall be established with the New York International Airport Traffic Control Tower prior to entering the airport traffic area for a landing at that airport and prior to take-off from that airport unless prior authorization is obtained from the airport traffic control tower.
- (b) Airport traffic area entry. Unless the VFR distance-from-cloud criteria requires otherwise, all fixed-wing aircraft landing at the New York International Airport shall enter the airport traffic area at the following altitudes: