FEDERAL AVIATION AGENCY
BUREAU OF AIR TRAFFIC MANAGEMENT
WASHINGTON 25, D. C.

May 5, 1960

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 60- 10

SUBJECT: New York International Airport Traffic Pattern Area Rules

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The Bureau of Air Traffic Management has under consideration a proposal which would establish a Special Civil Air Regulation governing the flight operations of all aircraft operating on and in the vicinity of the New York International Airport. 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 June 27, 1960.

D. D. Thomas

D. D. Thomas, Director
Bureau of Air Traffic Management

FEDERAL AVIATION AGENCY
BUREAU OF AIR TRAFFIC MANAGEMENT

[14 CFR 60]

[Reg. Docket No. 380 Draft Release 60-10]

NOTICE OF PROPOSED RULE MAKING

New York International Airport Traffic Pattern Area Rules

Notice is hereby given that the Bureau of Air Traffic Management will propose to the Administrator the adoption of special airport traffic rules for the New York International Airport.

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 June 27, 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.

Section 307(c) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1348(c)), authorizes and directs the Administrator of the Federal Aviation Agency to "prescribe air traffic rules and regulations governing the flight of aircraft, for the navigation, protection, and identification of aircraft, for the protection of persons and property on the ground, and for the efficient utilization of the navigable airspace, including rules as to safe altitudes of flight and rules for the prevention of collision." This provision of the Act requires the Administrator in the development of air traffic rules for the safety of interstate, overseas, and foreign air commerce to also provide in such rules proper protection to persons and property on the ground.

The objective of the rules proposed herein is the improvement of the safety of flight operations in the vicinity of the New York International Airport and the abatement of the aircraft noise problem as it affects communities adjacent to that airport. The provisions of this proposal which deal with aircraft noise are initial products of an Agency-wide program that seeks the reduction of the noise problem to the extent feasible by regulation under existing law. While several developments are under way in a number of different approaches to the problem, the airport traffic rule approach proposed herein

represents a practical method which can reduce the noise factor in an early and effective manner. Adoption of this proposal will provide the first Federally enforceable rule in the New York area designed in major part toward noise abatement. Future changes in this rule may be made as experience dictates.

In the establishment of traffic patterns which would be most suitable for the New York International Airport, the Federal Aviation Agency has considered the comprehensive studies and developments which have been made over the past several years by both the National Air Transport Coordinating Committee and the Port of New York Authority for the alleviation of local aircraft noise problems. The noise abatement procedures and techniques which have been developed by these two organizations have contributed extensively to the regulation being proposed.

This proposal will establish in regulatory form, procedures and techniques applicable to aircraft during landings, take-offs and operations within the airspace surrounding the New York International Airport and are designed to reduce noise to the extent consistent with safety. The principal method of noise reduction which forms the basis of these regulations is a combined system of preferential runways to be used for both landings and take-offs to minimize flight over

residential areas and the designation of specific traffic patterns with higher altitudes of flight.

Flight safety considerations and the requirements of domestic and foreign air commerce have been fundamental to the development of the preferential runway system proposed herein. While this system can be followed in a majority of all operations, it should be recognized that there will be occasions when the system cannot be followed.

The establishment of a preferential runway system involves consideration of a number of complex and variable operational factors necessary for the safety of a particular take-off or landing. These factors include the operational characteristics of the aircraft involved, the weather conditions, ground temperature, surface wind direction and velocity, and the condition of the runway. Additionally, the flight patterns to be followed to and from such runways must be compatible with the flow of air traffic at other airports so as to minimize the possibility of collision.

Recognizing these operational factors, the preferential runway system established in this proposal specifies certain selected runways which are to be used by all large propeller-driven and turbojet aircraft. Although it is operationally advantageous to operate an aircraft directly into the wind during landing and take-off, the directions of take-off

specified herein do not provide for such operations in many instances. While the preferential runway system will create additional problems for pilots and for the over-all efficient movement of air traffic at this airport, it is believed that such operational problems as are created will be compensated for by the increased benefits obtained in the public interest to be derived from the reduction of aircraft noise in the nearby communities.

The proposed preferential runway system for turbojet aircraft specifies four runways which may be used for take-off. Depending on the direction and velocity of surface wind, the primary runway would be 25 Left which permits take-off over Jamaica Bay. Runway 13 Right would be used as the next priority and runway 31 Left and 7 Right follow in that order. Runway 31 Left has been added to the preferential runway system for more wind directions which have not been utilized in the past. The added use of this runway is made possible by the extension of the runway to a total length of 14,600 feet. Aircraft taking off on this runway will be able to attain higher altitudes before passing the airport boundary thereby reducing the noise level on the surface below. The application of visual flight rule conditions climb procedures to aircraft departing from this runway on instrument flight plans in good weather conditions will also facilitate the use of an

earlier left turn to avoid residential areas. Requiring the use of this runway as an additional primary preferential runway is expected to contribute significantly to the over-all reduction of the noise problem.

The preferential runway system also designates a certain runway to be used when the surface wind is calm. When the surface wind is less than 5 knots all turbojet aircraft would be required to take off on runway 25 Left. When the surface wind is 5 knots or more but does not exceed 15 knots, the preferential runway system established for all turbojet and large aircraft would be used for both take-offs and landings. Small aircraft and helicopters are not required to use the preferential runway system.

The use of the preferential runway system is not mandatory for any aircraft when the surface wind velocity exceeds 15 knots because of the hazardous nature of strong crosswind components. However, when the surface wind velocity exceeds 15 knots, efforts will be made to continue the use of the preferential runway system to the extent that air safety will permit under the particular crosswind component involved.

The rules proposed herein would require that all fixed-wing aircraft climb to 1,500 feet as rapidly as practicable when the

cloud height permits. However, an exception is provided in the rule for certain aircraft which are capable of producing less noise in a slower climb rate with reduced power settings and other flight techniques. Since these particular aircraft produce more noise in a rapid climb than would be created under a less rapid climb, special exceptions will be authorized by the Agency in order to exploit this advantage. Another provision of the proposed rules which deal with the take-off phase of flight is the restriction against the use of runways 4 Right, 4 Left, 13 Left and 31 Right by turbojet aircraft. Under these rules, runways 4 Right, 4 Left, 13 Left, and 31 Right would be used for take-off only by propeller driven aircraft.

Although it is intended that the preferential runway system shall be used whenever the surface wind does not exceed 15 knots, it is not intended that this requirement will, in any way, abrogate the authority and responsibility of the pilot in command to assure safe operation of the aircraft. Therefore, if the pilot in command determines that use of the preferential runway is unsafe for a particular flight, another runway of his choice may be used when traffic permits such use. Whenever this prerogative is exercised, a written report of the reasons for such operation shall be forwarded within 48 hours to the Federal Aviation Agency. These reports will be reviewed to evaluate the reasons for the use of a different runway. Continuing study will be made of these reports by the Federal Aviation Agency to determine whether

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further changes in the rules are required to accomplish its objective.

In addition to the foregoing rules pertaining to preferential runways, all large aircraft equipped with a functioning instrument landing system will be required to maintain a minimum angle of descent when on final approach for a landing on those runways equipped with instrument landing systems. Compliance with this angle of descent will insure that such aircraft will remain at or above prescribed altitudes while on final approach over areas adjacent to the airport during all weather conditions.

The proposed rules would also establish an airport traffic pattern area that would include the airspace surrounding the New York International Airport within which these special operating rules would apply. This area would include all airspace below 2,000 feet within a radius of 5 miles of the geographical center of the airport.

All en route aircraft not intending to land at an airport within this area would be prohibited from operating in this airspace unless specifically authorized by air traffic control. Similarly, all training flight activity other than required airport qualification flights would be restricted from operating in this airspace.

All aircraft, military as well as civil, would be required to operate in the New York International Airport traffic pattern

area in conformance with the detailed operating procedures set forth in this regulation. These operating procedures prescribe a minimum altitude to be observed while entering, operating within, and departing the airport traffic pattern area. They also prescribe safe directions of flight over areas of least congestion which shall be followed by all aircraft operating within the traffic pattern area.

Further, these rules would establish a requirement for two-way communications for all aircraft landing at and taking off from the New York International Airport, and for any aircraft that may have need to operate en route through the traffic pattern area. This requirement is considered essential to the safe movement of the high volume of aircraft that typically operate within this airspace.

Although a Special Civil Air Regulation for a particular airport is proposed herein, the Agency is considering an air traffic regulation of general applicability which will standardize all controlled airport traffic pattern rules to the extent practicable and will also provide for the establishment of detailed local airport rules on a local basis. To the extent appropriate, the provisions of such a regulation may be substituted for provisions in this proposal. This Special Civil Air Regulation is being proposed at this time, however, to achieve improved safety and reduction of the noise problem as soon as possible.

In consideration of the foregoing, it is proposed to adopt a Special Civil Air Regulation governing the flight of aircraft on and in the vicinity of the New York International Airport, to read as follows:

New York International Airport
Traffic Pattern Area Rules

1. Scope and applicability. All aircraft operating within the airspace of the New York International Airport Traffic Pattern 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 these rules, the New York International Airport Traffic Pattern Area shall include the airspace within a 5 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, large aircraft as used in this regulation shall mean those aircraft of 12,500 pounds or more maximum certificated take-off weight. Small aircraft means all others.

2. General Rules.

(a) Avoidance of traffic pattern area. En route aircraft and aircraft engaged in flight training, other than required airport qualification flights, shall not be flown within the New York International Airport Traffic Pattern Area.

(b) Communications. Two-way radio communication

shall be established with the New York International Airport Traffic Control Tower prior to entering the traffic pattern area for a landing at that airport and prior to take-off from that airport unless prior authorization from the airport traffic control tower has been obtained.

3. Traffic pattern 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 traffic pattern area at the following altitudes:

(a) Large aircraft. Large aircraft shall enter the traffic pattern area at an altitude of at least 1,500 feet above the surface. After entry, an altitude of at least 1,500 feet shall be maintained until maneuvering for a safe landing requires further descent.

(b) Small aircraft. Small aircraft shall enter the traffic pattern area at an altitude below 1,200 feet but not less than 1,000 feet above the surface. After entry, an altitude between 800 and 1,000 feet shall be maintained until maneuvering for a safe landing requires further descent.

4. Final approach. When approaching to land at the New York International Airport on a runway served by a functioning instrument landing system (ILS), large fixed-wing aircraft equipped with functioning ILS instrumentation shall remain at or above the glide slope altitude between the outer marker and the middle marker.

5. Departures.

(a) Rate of Climb. Unless the VFR distance-from-cloud criteria requires otherwise, all fixed-wing aircraft taking off from the New York International Airport shall climb to at least 1,500 feet as rapidly as practicable; provided that, the Administrator may specify a different rate of climb for a particular type of aircraft when he finds that greater advantages in noise reduction can thereby be achieved.

(b) Take-off Runway Restriction. Pilots of turbojet aircraft shall not use runways 4 Left, 4 Right, 13 Left, or 31 Right for take-off.

6. New York International Airport Preferential Runway System.

(a) Large Fixed-Wing Propeller-Driven Aircraft.

When applicable aircraft performance limitations permit, the ceiling and visability are equal to, or greater than 1,000 feet and 3 miles respectively, and the runway to be used is dry, pilots of large, fixed-wing propeller-driven aircraft shall use the following preferential runway system unless the surface wind at the time of the take-off or landing exceeds a velocity of 15 knots.

Wind Direction	Take-off Runway	Landing Runway
N	31L	4R/L
NNE	31L	4R/L
NE	7R	4R/L
ENE	13L/R	13R/L, 4R/L
E	13L/R	13R/L, 4R/L
ESE	13L/R	13R/L, 4R/L
SE	13L/R	13R/L, 4R/L
SSE	13L/R - 22R/L	13R/L, 22L/R
S	22R/L - 25L	22L/R
SSW	22R/L - 25L	22L/R
SW	22R/L - 25L	22L/R
WSW	22R/L - 25L	22L/R
W	22R/L - 25L	22L/R
WNW	22R/L - 25L	22L/R
NW	31L/R - 25L	31R/L
NNW	31L/R	4R/L
Calm (0-5)	22R/L - 25L	22R/L, 4L/R 1/

(b) All turbojet aircraft. When the applicable aircraft performance limitations permit, the ceiling and visibility are equal to or greater than 1,000 feet and 3 miles respectively, and the runway to be used is dry, pilots of turbojet aircraft shall use the following preferential runway system unless the surface wind at the time of take-off or landing exceeds a velocity of 15 knots:

Wind Direction	Take-off Runway	Landing Runway
N	31L	4R/L
NNE	31L	4R/L
NE	7R - 13R	4R/L
ENE	13R	13R/L, 4R/L
E	13R	13R/L, 4R/L
ESE	13R	13R/L, 4R/L
SE	13R	13R/L, 4R/L
SSE	13R	13R/L, 22L/R
S	25L	22L/R
SSW	25L	22L/R

Wind Direction	Take-off Runway	Landing Runway
SW	25L	22L/R
WSW	25L	22L/R
W	25L	22L/R
WNW	25L	22L/R
NW	31L-25L	31R/L
NNW	31L	4R/L
Calm (0-5)	25L	22R/L, 4L/R 1/

(c) Alternate Runway. In the event the preferential runway is closed for take-off or landing, the pilot of an aircraft subject to the requirements of this section shall use an alternate runway for take-off or landing as assigned by the airport traffic control tower.

(d) Use of Other Runways. If the pilot of an aircraft subject to the requirements of this section determines that use of the preferential runway or alternate runway assigned by air traffic control is unsafe for the operation of his aircraft he may use another runway of his choice, subject to other air traffic. If the pilot makes such a choice, a written report of the reasons therefor shall be forwarded within 48 hours to the Chief, Flight Standards Division, Federal Aviation Agency, Region One, Jamaica, New York.

1/ Traffic permitting and with pilots concurrence, runway 4 may be used for landing while runways 22 and 25L are being used for take-off.

NOTE: In determining the safety factor for total required runway length for take-off, the pilot's calculation may include an additional 1% of runway length for each 3 knots of cross-wind component over and above the minimum required take-off runway length.

7. Traffic pattern rules for Floyd Bennett Naval Air Station. All aircraft operating in that portion of the Floyd Bennett Naval Air Station traffic pattern which may extend into the New York International Airport Traffic Pattern Area shall be flown so that traffic landing on runways 19 or 24 will remain at or below 800 feet until clear of the New York International Airport Traffic Pattern Area. Departures on runways 6 or 1 shall execute the first turn after take-off so as to remain clear of the New York International Airport Traffic Pattern Area.

This regulation 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).

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Director, Bureau of Air Traffic Management

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