### FEDERAL AVIATION AGENCY AIR TRAFFIC SERVICE WASHINGTON 25, D. C.

September 21, 1962

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 62-42

SUBJECT: Anchorage, Alaska, Terminal Area Rules

The Air Traffic Service has under consideration a proposal to designate certain airspace and prescribe traffic pattern and other rules within that airspace governing flight of all aircraft in the vicinity of Anchorage, Alaska. 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.

All comments must be submitted in duplicate to the Docket Section, Federal Aviation Agency, Room A-103, 1711 New York Avenue, N. W., Washington 25, D. C. In order to insure consideration, comments must be received by the Agency prior to November 29, 1962.

Director, Air Traffic Service

D. D. Thomas

As published in the Federal Register on September 28, 1962 (27 F. R. 9615)

## FEDERAL AVIATION AGENCY

[ 14 CFR Parts 60, 619 ]

[Reg. Docket No. 1396; Draft Release 62-42]

# ANCHORAGE, ALASKA, TERMINAL AREA

#### Notice of Proposed Rule Making

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 Part 619, regulations of the Administrator, and to rescind section 60.18-5 of Civil Aeronautics Manual 60 (14 CFR 60.18-5), 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 A-103, 1711 New ork Avenue NW., Washington 25, D.C. all communications received by November 29, 1962, will be considered by the Administrator before taking action upon this proposed rule. The proposal contained in this notice may be changed in the light of comments received. All comments submitted will be available in the Docket Section for examination at any time by interested persons. 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.

Section 307(c) of the Federal Aviation Act of 1958 authorizes and directs the Administrator of the Federal Aviation Agency to prescribe air traffic rules and regulations governing the flight of § 69.18 applicable to all pilots operating to or from any airport within the Anchorage terminal area. In addition, it would establish traffic patterns at Lake Campbell and Sixmile Lake Airports.

This proposal provides for the continuation of traffic patterns locally established and long used at all airports except for traffic patterns serving runways 15/33 at Merrill Field. These established patterns include righ-hand traffic flow where necessary to preclude overlapping with adjacent traffic patterns. In the case of Merrill Field, it is considered necessary in the interest of safety to relocate those patterns serving runways

The Anchorage terminal area includes five major airports served by a control tower; three civil-Anchorage International, Merrill Field, and Lake Hood Airports, and two military-Elmendorf Air Force Base and Bryant Army Airfield Airports. Additionally, Sixmile Lake and Campbell Lake Airports are located within the terminal area. These airports are all in close proximity to each other, being contained within an area approximately fifteen miles long by five miles wide. The air traffic using these airports is extremely diverse; military and civil aircraft, jet and propeller driven, high speed and slow, land and floatplanes, airplanes and helicopters. During 1961, total aircraft operations at the five major airports was 417,751. Of this total, 122,557 were operations at the two military airports and 295,194 were operations at the three civil airports. Additional traffic activity is generated by Sixmile Lake and Campbell Lake Airports. Because of the intermixing and concentration of a high volume of traffic having widely diverse operating characteristics, using several adjacent airports and due to the unique topography of the area, it appears necessary to provide for the segregation of traffic within the terminal area.

The application of \$60.18 to the Anchorage terminal area creates five individual and overlapping airport traffic areas. This configuration may prove confusing to pilots in determining which control tower to contact when passing through one or more airport traffic areas not associated with the airport of intended operation.

Section 60.18, while providing for radio communications and standardized direction of traffic flow, does not fully meet the specific needs of such a complexity of airports and air traffic as contained in the Anchorage terminal area. The provisions of § 60.18 do not provide, nor were they expected to provide, a complete solution to all airport traffic problems at all airports and within all terminal areas. They do represent the most satisfactory solution to most of the airport traffic problems and which can be applied at a great majority of airport terminals.

The regulation proposed herein would create a consolidated airport traffic area, to be designated the Anchorage Airport Traffic Area. It would encompass the five airports with control towers in the Anchorage terminal area. The proposal would establish traffic patterns at each of these airports and prescribe certain air traffic rules additional to those in

§ 60.18 applicable to all pilots operating to or from any airport within the Anchorage terminal area. In addition, it would establish traffic patterns at Lake Campbell and Sixmile Lake Airports.

This proposal provides for the continuation of traffic patterns locally established and long used at all airports except for traffic patterns serving runways 15.33 at Merrill Field. These established patterns include righ-hand traffic flow where necessary to preclude overlapping with adjacent traffic patterns. In the case of Merrill Field, it is considered necessary in the interest of safety to relocate those patterns serving runways 15/33 so as to avoid the populous area west of the airport. The traffic patterns included herein would establish lefthand traffic flow for runway 15 and right-hand traffic flow for runway 33, placing aircraft over the less congested area to the east of the airport.

Segregation of fast and slow aircraft by traffic pattern altitude was not established in § 60.18. It was considered that natural segregation would result from different aircraft speeds, wherein aircraft of higher speed normally fly a wider pattern. Within the Anchorage terminal area, the traffic patterns are contained within a very limited area which does not permit the type of segregation resulting from speed differential. Therefore, in view of the need for segregation, the proposed traffic patterns include altitudes for the use of both fast and slow aircraft.

The proposed Anchorage Airport Traffic Area, hereinafter referred to as the airport traffic area, would extend upward to 2,700 feet m.s.l., and include that airspace within the circular limits of a fivestatute-mile radius from the center of the Anchorage International Airport, a five-statute-mile radius from the center of Elmendorf Air Force Base Airport, a three-statute-mile radius from the center of Merrill Airport and a threestatute-mile radius from the center of Bryant Army Airfield. That airspace lying generally northwest of the west bank of Knik Arm has been excluded to enable en route traffic to follow the west shoreline of Knik Arm without prior approval of air traffic control. (A chart depicting the configuration of the airport traffic area is attached to this proposal.)

Additional exclusions are proposed in the airspace underlying certain portions of the airport traffic area. Near the north and south boundaries, the base would be established at 600 feet m.s.l. This will permit light aircraft to operate to and from Lake Campbell and Sixmile

Lake Airports without entering the airport traffic area. The remaining portion of the airport traffic area overlying the waters and tidal flats of Knik Arm and Turnagain Arm would be established at base of 300 feet m.s.l., to permit operations over these areas without entry into the airport traffic area.

The airspace within the proposed airport traffic area would be divided into segments consisting of the International, Lake Hood, Merrill, Elmendorf, and Bryant segments. The segments are established to achieve a safe and equitable distribution of the limited airspace and to resolve the apparent ambiguity of the individual overlapping airport traffic areas. The users of each airport would be provided with airspace allotted primarily for their use and available to users of other airports only when so authorized by air traffic control. The segments and their boundaries were defined only after lengthy consideration had been given to the nature and type of operations using each airport, the direction of major traffic flow to and from the area, and the known needs of the users.

The heaviest concentration of traffic, and the greatest potential hazard, is in the airspace overlying Knik Arm. To some extent, this concentration of traffic can be related to the topography of the Anchorage treminal area. The mountainous areas to the east and the large body of water to the south have the combined effect of funnelling a major portion of the civil traffic to and from Anchorage airports into the area west of the city and over the waters of Knik Arm.

Aircraft operating to and from Elmendorf Air Force Base normally utilize a flight path along the centerline of runway 9 extended, a path overlying Knik Arm. The majority of this traffic is high performance military jet aircraft operating in a critical flight condition since they are either executing an approach or have just departed. Civil aircraft operating to and from points west, north and east must cross Knik Arm and the approach path to Elmendorf. Thus, the military aircraft are operating in a critical phase of flight through the area where possible confliction with light aircraft is most likely to occur.

For several years, NOTAM's, pilot bulletins and briefing materials have been employed in calling attention to the hazards of this area. Pilots have been encouraged to observe certain procedures designed to provide a measure of segregation between civil and military aircraft. Segregation which has been attained through these measures is voluntary and indefinite, and it is believed essential that regulatory action be taken to minimize conflict and to ensure that all pilots comply with specific requirements.

This regulation would provide increased segregation between the civil and military traffic which converge in this This would be accomplished by channeling the operations to or from the affected airports with altitude limitations placed on such operations. For example, military aircraft operating to or from Elmendorf Air Force Base could be operated north of midchannel of Knik Arm, at an altitude between 1,500 and 1.700 feet m.s.l. through the International and Lake Hood segments, and through the Merrill segment at an altitude between 900 and 1,700 feet m.s.l. Aircraft operated to or from the civil airports would have similar altitude limitations which would permit such aircraft to cross Knik Arm either below or above the altitudes specified for Elmendorf

Likewise, it also provides for segregation of civil traffic operating to or from the three civil airports. The proposal provides that, unless otherwise authorized, aircraft operated to or from an airport within the airport traffic area shall, while within such area, be flown only within the designated segment containing the airport.

Random operations to or from any of the airports concerned, by routes not contained within the segment surrounding the airport of intended operation, may be requested from air traffic control at any time. A pilot would need to contact only the tower serving the airport of intended landing, or departure, and the necessary coordination would be accomplished by such tower.

Regulations of the Administrator, Part 619-Special Airport Traffic Rules, contains special airport traffic rules which apply to airport traffic areas as designated in the part. In establishing this part, it was the Agency view that airport traffic pattern rules currently contained in CAM 60 and future special airport traffic rules would be included in this part. The applicability as stated in § 619.1, however, limits the scope to those special air traffic rules which apply to airport traffic areas as designated in the part. In addition, some confusion may exist regarding the applicability of the special rules contained in this part in relation to rules contained elsewhere in the regulations. It is proposed to amend § 619.1 to expand the scope to provide for all airports and to clarify the applicability of the special rules by specifying that all provisions of Part 60 are applicable also, except that in case of conflict the provisions of this part shall auply.

The proposed regulations for the Anchorage terminal area would be established as § 619.15. Accordingly, this action renders obsolete CAM 60.18-5, Traffic Patterns for Anchorage Airport and Lake Hood-Lake Spenard Landing

Area. Therefore, it is also proposed that CAM 60.18-5 (14 CFR 60.18-5) be revoked.

This proposal is subject to the FAA Recodification Program. The final rule, if adopted, may be in a recodified form; however, the recodification itself will not alter the substantive contents proposed herein.

In consideration of the foregoing, it is proposed to revoke § 60.18-5 of Civil Aeronautics Manual 60 and amend regulations of the Administrator, Part 619, as follows:

1. By amending § 619.1 to read:

#### § 619.1 Purpose and scope.

This part contains special air traffic rules for operation within airport traffic areas or operation on and in the vicinity of the airports designated herein. These rules are supplementary to the air traffic rules contained elsewhere in the Civil Air Regulations. All provisions of Part 60 are applicable to operations within an airport traffic area designated in this part, including provisions applicable to an airport traffic area as defined in Part 60, except that in case of conflict the provisions of this part shall govern.

#### 2. By adding a new § 619.15 to read:

## § 619.15 Anchorage, Alaska, terminal area rules.

(a) Anchorage Airport Traffic Area. The Anchorage Airport Traffic Area, hereinafter referred to in this section as the airport traffic area, is hereby designated as that airspace extending upward from the surface to, but not including, 2,700 feet m.s.l. bounded by a line beginning at Point MacKenzie extending northerly along the west bank of Knik Arm to a point east of Lake Lorraine intersecting an arc of a five-statute-mile radius circle centered on the geographical center of Elmendorf Air Force Base Airport, thence clockwise along this arc to its intersection with Restricted Area R-2203, thence along the west, south, and east boundary of R-2203 to its intersection with an arc of a three statute mile radius circle centered on the geographical center of Bryant Army Airfield Airport, thence clockwise along this arc to its intersection with an arc of a fivestatute-mile radius circle centered on the geographical center of Elmendorf Air Force Base Airport, thence clockwise along this arc to its intersection with an arc of a three-statute-mile radius circle centered on the geographical center of Merrill Airport, thence clockwise along this arc to its intersection with an arc of a five-statute-mile radius circle centered on Anchorage International Airport, thence clockwise along this arc to the north bank of Knik Arm, thence southeast along the shoreline to the point of beginning.

(1) It excludes:

(i) That airspace at and below 600 feet m.s.l., north of a line beginning at the intersection of Farrell Road and the northeast boundary of the airport traffic area extending generally west along Farrell Road to the east end of Sixmile Lake, thence along a line bearing on the middle of Lake Lorraine to the boundary of the airport traffic area;

(ii) That airspace at and below 600 feet m.s.l., south of a line beginning at the intersection of Seward Highway and the southeast edge of the airport traffic area, extending north along Seward Highway to Sand Lake Road, thence generally west along Sand Lake Road to the shoreline of Turnagain Arm, thence true west to the boundary of the airport traffic area: and

(iii) That airspace at and below 300 feet m.s.l., which overlies the waters and tidal flats of Knik Arm and Turnagain

Arm.

(2) It is subdivided as follows:

(i) International segment. That area lying within a line beginning at the intersection of Seward Highway and the south boundary of the airport traffic area, extending north along Seward Highway to International Airport Road. thence along International Airport Road to the airport terminal building, thence long a line one-fourth mile east of and trallel to runway 13-31 to the airport traffic area boundary, thence counter-clockwise along the airport traffic area boundary to the point of beginning.

- (ii) Merrill segment. That area lying within a line beginning at Point Mac-Kenzie, extending direct to the mouth of Fish Creek, thence along Fish Creek to Northern Lights Boulevard, thence east along Northern Lights Boulevard to Seward Highway, thence south along Seward Highway to the boundary of the airport traffic area, thence northeast along the airport traffic area boundary to a point east of the Gaging Station, thence true west on a direct line through Mile 4 of Palmer Highway to Ship Creek, thence along Ship Creek to its mouth, thence on a direct line toward the center of Lake Lorraine to the airport traffic area boundary, thence counterclockwise along the airport traffic area boundary to the point of beginning.
- (iii) Lake Hood segment. That area lying between the International segment and the Merrill segment.
- (iv) Elmendorf segment. That area lying north of the Merrill segment and within a line beginning at the intersection of Palmer and Davis Highways extending generally north along Davis Highway to Loop Road, thence north along Loop Road to the boundary of the airport traffic area, thence counter-clockwise along the airport traffic area boundary and the north boundary of the Merrill segment to the point of beginning,

(v) Bryant segment. That area lying north of the Merrill segment and east of the Elmendorf segment.

(b) General rules. All aircraft operated to, from, or on an airport within the airport traffic area shall be operated in accordance with the following rules unless otherwise authorized or required by air traffic control:

(1) Fixed-wing aircraft shall be flown to conform to the flow of traffic depicted on the diagrams included herein. Helicopters shall be flown in a manner which avoids the flow of fixed-wing aircraft.

- (2) Except as provided in subparagraph (7) (iv) and (v) of this paragraph, all aircraft shall be flown only within the designated segment containing the airport of landing or take-off.
- (3) Two-way radio communications shall be maintained with the control tower serving the airport of landing or take-off.
- (4) International airport: (i) Aircraft may not be operated between 1,200 feet m.s.l., and 2,000 feet m.s.l., in that portion of the International segment lying north of the midchannel of Knik Arm.
- (ii) Fixed-wing aircraft operated at an airspeed in excess of 105 knots within the International segment, exclusive of subdivision (i) of this subparagraph, shall be flown at an altitude of at least 1,600 feet m.s.l., until maneuvering for a safe landing requires further descent.
- (iii) Fixed-wing aircraft operated at an airspeed of 105 knots or less within the International segment, exclusive of subdivision (i) of this subparagraph, shall be flown at an altitude of at least 900 feet m.s.l., until maneuvering for a safe landing requires further descent.
- (5) Lake Hood airport: (i) Aircraft may not be operated between 1,200 feet m.s.l. and 2,000 feet m.s.l., in that portion of the Lake Hood segment lying north of the midchannel of Knik Arm.
- (ii) Fixed-wing aircraft shall be flown within the Lake Hood segment, exclusive of subdivision (i) of this subparagraph, at an altitude of at least 600 feet m.s.l. until maneuvering for a safe landing requires further descent.
- (iii) When the Lake Hood control tower is not in operation, two-way radio communications shall be maintained with Anchorage International control tower.
- (6) Merrill airport: (i) Aircraft may not be operated between 600 feet m.s.l. and 2,000 feet m.s.l., in that portion of the Merrill segment lying north of the midchannel of Knik Arm.
- (ii) Fixed-wing aircraft operated at an airspeed in excess of 105 knots within the Merrill segment, exclusive of subdivision (i) of this subparagraph, shall be flown at an altitude of at least 1,200 feet m.s.l., until maneuvering for a safe landing requires further descent.

(iii) Fixed-wing aircraft operated at an airspeed of 105 knots or less within the Merrill segment, exclusive of subdivision (i) of this subparagraph, shall be flown at an altitude of at least 900 feet m.s.l., until maneuvering for a safe landing requires further descent.

(7) Elmendorf airport: (i) Turbine powered fixed-wing aircraft shall be flown within the Elmendorf segment at an altitude of at least 1,700 feet m.s.l.. until maneuvering for a safe landing re-

quires further descent.

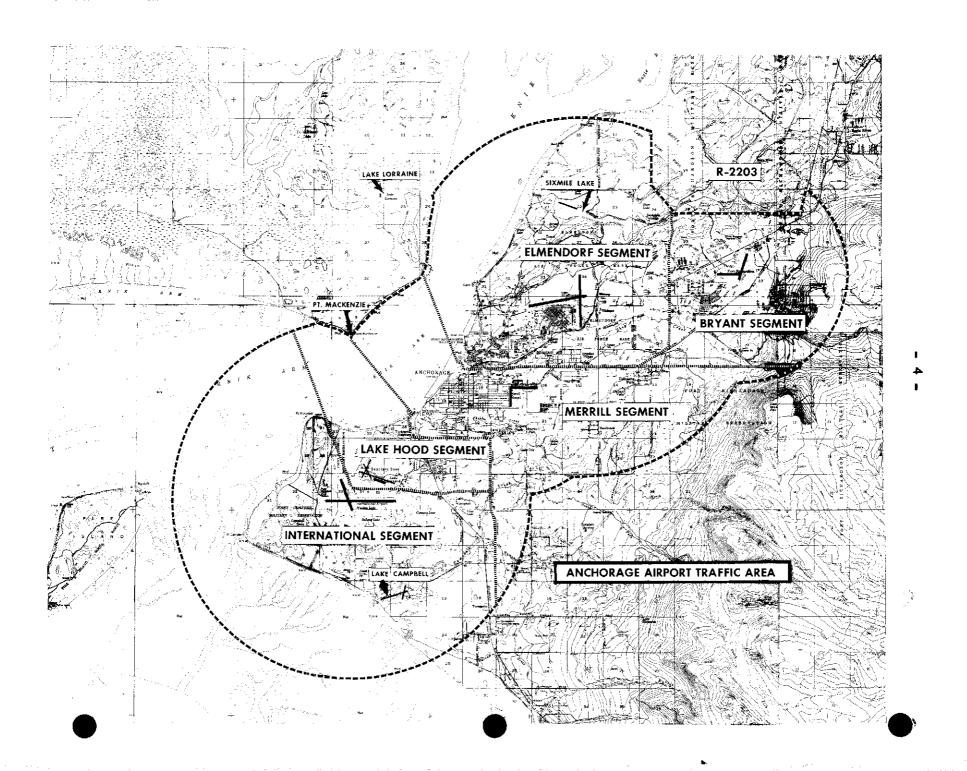
(ii) Other fixed-wing aircraft operated at an airspeed in excess of 105 knots within the Elmendorf segment shall be flown at an altitude of at least 1,200 feet m.s.l., until maneuvering for a safe landing requires further descent.

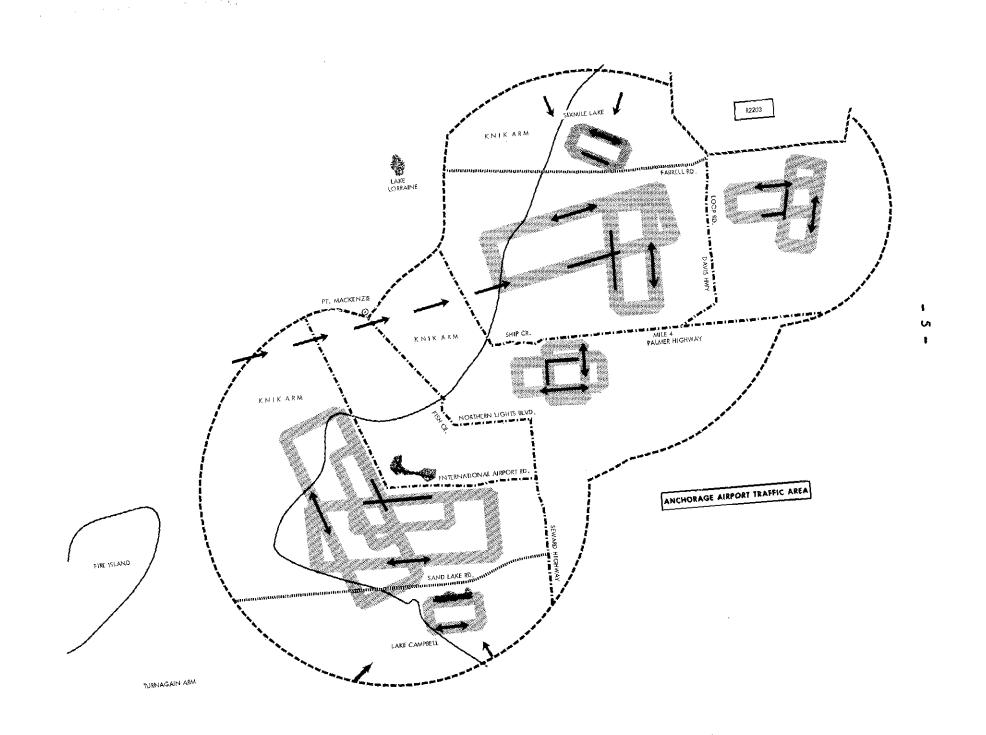
- (iii) Fixed-wing aircraft operated at an airspeed of 105 knots or less within the Elmendorf segment shall be flown at an altitude of at least 700 feet m.s.l., until maneuvering for a safe landing requires further descent.
- (iv) Aircraft may be flown at an altitude between 1,500 feet m.s.l. and 1,700 feet m.s.l., within those portions of the International and Lake Hood segments lying north of midchannel of Knik Arm.
- (v) Aircraft may be flown at an altitude between 900 feet m.s.l. and 1,700 feet m.s.l., within that portion of the Merrill segment lying north of midchannel of Knik Arm.
- (8) Bryant airport: (i) Fixed-wing aircraft shall be flown within the Bryant segment at an altitude of at least 1.000 feet m.s.l., until maneuvering for a safe landing requires further descent.
- (ii) When the Bryant control tower is not in operation, two-way radio communications shall be maintained with Elmendorf control tower.
- (c) Special requirements. operated to or from Lake Campbell and Sixmile Lake Airports shall conform to the flow of traffic for such lake operations as depicted on the diagrams included herein.

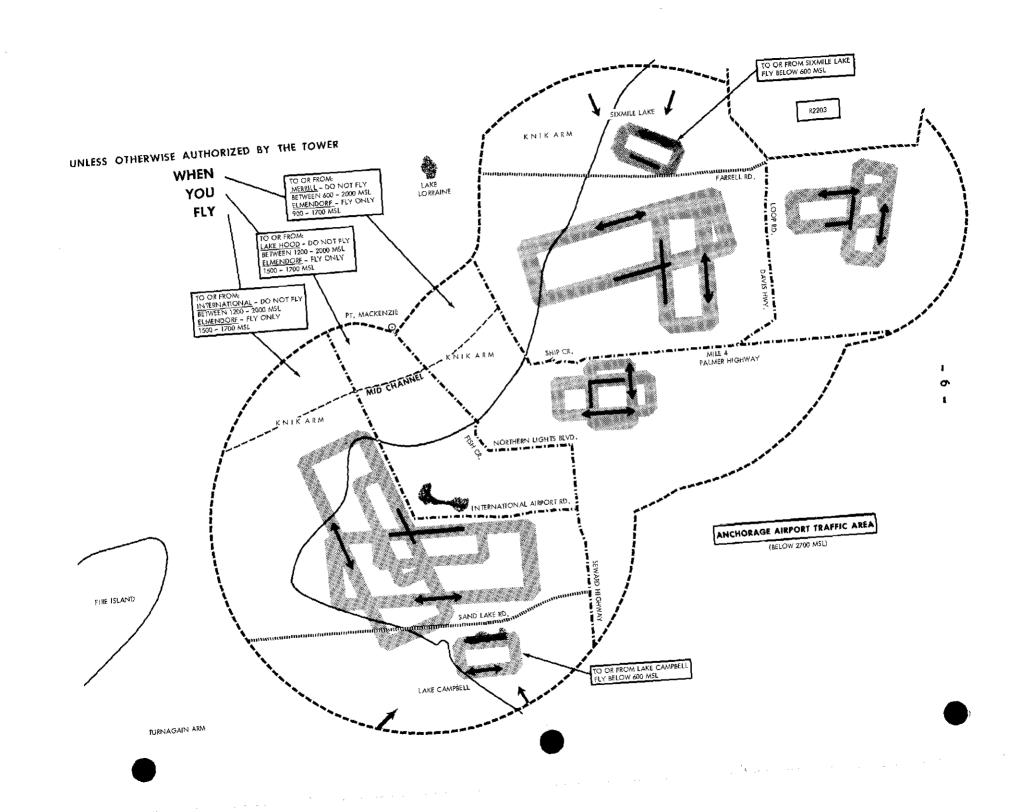
This amendment is proposed under the authority of section 307 of the Federal Aviation Act of 1958 (72 Stat. 749, 49 U.S.C. 1348).

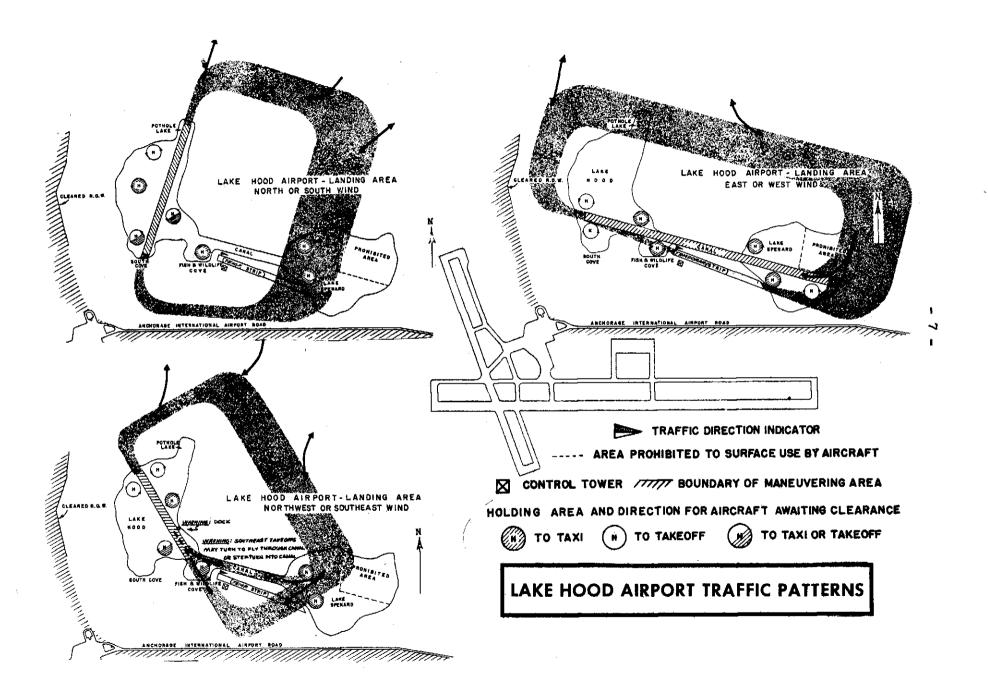
Issued in Washington, D.C., on September 21, 1962.

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









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