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

May 4, 1960

CIVIL AIR REGULATIONS DRAFT RELEASE NO. 60-8

SUBJECT: Definition of Controlled Airspace; Rescission of Civil Air Regulations Amendments 60-14 and 60-14A

The Bureau of Air Traffic Management of the Federal Aviation Agency has under consideration a proposal to rescind Amendments 60-14 and 60-14A and to adopt a new amendment to recognize the requirement of the VFR pilot for additional airspace above obstructions and above congested areas. The reasons therefor are set forth in the explanatory statement in 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., and in order to insure consideration must be received by the Agency not later than June 21, 1960.

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

FEDERAL AVIATION AGENCY

BUREAU OF AIR TRAFFIC MANAGEMENT

[14 CFR 60]

[Reg. Docket No. 375 ; Draft Release No. 60-8]

AIR TRAFFIC RULES

NOTICE OF PROPOSED RULE MAKING

Definition of Controlled Airspace; Rescission of Civil Air Regulations Amendments 60-14 and 60-14A

Pursuant to the authority delegated to me by the Administrator (§405.27 24 F.R. 2196), notice is hereby given that the Federal Aviation Agency has under consideration a proposal to rescind Civil Air Regulations Amendments No. 60-14 and 60-14A (24 F. R. 8951, 25 F.R. 11078) and to adopt a new amendment to Part 60 of the Civil Air Regulations 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 by June 21, 1960, 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 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. However, you may be assured that all comments will be given careful consideration.

Part 60 of the Civil Air Regulations comprises the air traffic rules and contains certain definitions pertinent thereto. Section 60.17(b) requires, in effect, that an altitude providing at least 1,000 feet vertical separation above the highest obstacle within a horizontal radius of 2,000 feet of the flight path of the aircraft must be maintained during flight over congested areas. Section 60.30 prescribes the weather minimums for VFR flight. Section 60.60 defines, among other things, the subdivisions of controlled airspace. The term "control area" is defined, in part, as "...extending upward from 700 feet above the surface..."

Civil Air Regulations Amendment 60-14 was adopted by the Civil Aeronautics Board on December 29, 1958, and was designed to provide additional uncontrolled airspace for the conduct of VFR flight operations. The amendment recognized the requirement to establish a more reasonable balance between the airspace provided to the VFR and to the IFR user. It provided that "floors" of controlled airspace be established 1,500 feet above terrain, or higher if deemed appropriate by the Administrator. The rule provided for "terminal control areas" designed to provide controlled airspace upward from 700 feet above terrain to accommodate instrument flight operations maneuvering in the vicinity of airports. The amendment also provided that an upper limit of controlled

airspace might be established in order to provide uncontrolled airspace above certain airway segments. Realizing the magnitude of the task involved in revising the entire national airspace structure, the Board designated January 1, 1960, as the mandatory effective date of the amendment.

The Federal Aviation Agency, concerned with the many technical problems apparent in the implementation task, was obliged to conduct a comprehensive analysis to determine the effect of the airspace changes upon the safety of flight and upon the air traffic control system. The study was extremely detailed and time consuming, and it became evident that the Agency could not complete the analysis and implement the amendment within the prescribed time. Therefore, the Federal Aviation Agency gave public notice in Draft Release No. 59-16, dated October 28, 1959, that it proposed to extend the mandatory effective date of the amendment. The additional time was required to permit the Agency to complete the analysis and to observe the requirements of the Administrative Procedure Act in implementing actions. Civil Air Regulations Amendment 60-14A, adopted December 31, 1959, extended the mandatory effective date of Amendment 60-14 until July 1, 1960.

The analysis has now been completed. The findings indicated that modification of the existing airspace structure beyond that envisioned by Amendment 60-14 is required to more fully observe

the responsibility of the Federal Aviation Agency to the VFR pilot. Specifically, it was found that additional uncontrolled airspace should be provided to permit the conduct of VFR flight within obstruction-free airspace and to permit the conduct of such flight in accordance with the minimum altitude above congested area requirements of §60.17(b). The policy of providing such obstruction-free airspace to insure the safe use of the navigable airspace by the VFR pilot shall be a major factor in the Agency's considerations of future airspace proposals regarding the erection of high obstructions.

The analysis also indicated that the title "terminal control area" as used in Amendment 60-14 tended to create ambiguity because of the limitation of the word "terminal." It is proposed therefore to retitle the airspace used for transition between the control zone and control area as "transition area."

The transition area will be used to provide controlled airspace for transition between control zones and the control areas (airways) or between control areas and uncontrolled airports. Transition areas will also be used to provide controlled airspace for use during transition between different route structures or segments. For example, in many cases the airways of the high altitude route structure do not directly overlie airways of the low altitude route structure; transition areas are proposed to provide the necessary controlled airspace for transition between

the two structures. Transition areas, as proposed, will have lower limitations as designated, but will, in no case, provide a floor of controlled airspace less than 1,200 feet above the terrain. Transition areas shall extend upwards to the base of overlying controlled airspace.

The floor of the transition area is proposed to be 1,200 feet above the surface, or higher if so designated. The lowest usable IFR altitude within transition areas that may be assigned by air traffic control will be derived from obstruction clearance criteria. In addition, it will be established at least 300 feet above the floor of the transition area. This 300-foot buffer, segregating IFR and VFR operations, is considered necessary for the sake of safety and is consistent with present requirements.

Under the provisions of this proposal, the Federal Aviation Agency will, at the local level, carefully consider the requirements and general traffic flow associated with uncontrolled airports located in the vicinity of control zones. The typical VFR routes to and from these airports will be determined. Uncontrolled airspace will be provided for VFR access to many, although probably not all, of these airports, even to the extent of providing uncontrolled "VFR corridors." Within such corridors and other airspace normally used for access, the floor of transition areas will be established at a level which will provide at least

1,000 feet vertical separation above man-made obstructions in addition to the requirement to provide 1,200 feet above terrain. This does not mean that the floor of controlled airspace will be established 1,000 feet above obstructions in all cases, but rather that obstruction clearance will be provided if a review of the VFR operations indicates that VFR flights typically operate in proximity to such obstructions. It becomes immediately apparent that such determinations cannot be made without a thorough and detailed knowledge of the flight "habits" of both the IFR and the VFR pilot. It is also obvious that such determinations cannot be made arbitrarily, but will require the cooperative efforts of local representatives of user agencies, as well as of the Federal Aviation Agency, if this proposed amendment is to attain its goal.

Under this proposal, the lateral dimensions of a control zone will be dependent upon the amount of controlled airspace required as determined by application of aircraft climb and approach criteria. As distinguished from the five-mile radius contained in Amendment 60-14, the area of a control zone will normally encompass an area of nine miles in radius, with extensions if required for IFR climb and descent between the airport and the transition area.

As previously stated, transition areas are proposed to be established with a floor of at least 1,200 feet above terrain,

with special consideration given to the obstruction clearance factor within those areas containing normal flyways for VFR flight operations. For maximum flexibility, the transition area floor may be determined and established in one of two ways. In one method the floor of the transition area, as was provided by Amendment 60-14, may be based solely upon a fixed height and following the changes in the elevation of the terrain. In the relatively flat areas, it may prove advantageous to use an alternate method, not provided in Amendment 60-14, by designating the floor of transition areas at a fixed height common to the transition area which would not follow the changes in terrain. The decision as to which method is more appropriate will depend, of course, upon local terrain.

The floors of control areas are proposed to be designated, by appropriate airspace actions, at a level 500 feet or more above obstructions and at least 500 feet below the lowest altitude normally assigned by air traffic control for IFR flights. Such altitudes will be determined primarily from past altitude usage. However, in all cases this altitude will be a cardinal altitude (odd or even thousand foot levels) at or above the Minimum En Route Altitude. Control areas will normally extend upwards to the base of the continental control area. However, as in Amendment 60-14, if there is no requirement for controlled airspace to this level, an upper limitation may be established at a specified

altitude. In many cases such action can meet the requirements of low-altitude, short-haul IFR operations, while still freeing uncontrolled airspace above the airway for VFR operations.

The definition of "Continental Control Area" is proposed to be modified to exclude the airspace over the State of Alaska.

It is proposed that December 31, 1961, be established as the target date for the completion of airspace actions associated with this amendment. However, the language of the amendment also permits partial implementation of its provisions by appropriate airspace action at any time subsequent to the date of its adoption and publication in the Federal Register.

In consideration of the foregoing, the Administrator will in a separate action rescind Amendments 60-14 and 60-14A (24 F. R. 8951, 25 F. R. 11078) and it is hereby proposed to amend Part 60 of the Civil Air Regulations (14 CFR 60) as follows:

1. By amending §60.30(a)(2) by changing the phrase "700 feet" in the two places it occurs to read "1,200 feet."

2. By amending §60.30(b) by redesignating subparagraph (3) as subparagraph (4) and by adding a new subparagraph (3) to read as follows:

§60.30 Basic VFR minimum weather conditions. * * *

(b) Visibility within controlled airspace. * * *

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

3. By amending §60.30(c) by changing the phrase "700 feet" in the second sentence to read "1,200 feet."

4. By amending the "Basic VFR Minimum" chart contained in this part by adding the words "AND TRANSITION AREA" following the words "CONTROL AREA" in the first column; by changing the headings "700 feet or BELOW" and "ABOVE 700 feet" in the "DISTANCE FROM CLOUDS" column to read "1,200 feet or BELOW" and "ABOVE 1,200 feet," respectively; by changing the phrase "700 feet" in footnote 2 to read "1,200 feet."

5. By amending the definitions contained in §60.60 as follows:

(a) By adding to the definition of continental control area a new sentence to read, "The continental control area shall not include the airspace over the State of Alaska."

(b) By amending the definition of "Control Area" as it appears in that section to read as follows:

"Control area. An airspace of defined dimensions within which air traffic control is exercised, and designated by the Administrator for the purpose of providing controlled airspace to encompass the flight paths of en route aircraft. Control areas shall extend upwards from a base at 700 feet above the surface until such base is otherwise designated. Unless otherwise limited, a control area shall extend upwards to the base of the continental control area."

(c) By amending the definition of "Controlled Airspace" as it appears in that section by inserting the term "Transition

area" immediately following the term "Control zone;" and by adding a note at the end of the definition to read as follows:

"Note: The dimensions of controlled airspace are designated by the Administrator and published in Part 601 of this Title (14 CFR Part 601). These designations also may be found on charts published by the United States Coast and Geodetic Survey and the Aeronautical Chart and Information Center."

(d) By adding in proper alphabetical order a new definition "Transition Area" to read as follows:

"Transition area. An airspace of defined dimensions within which air traffic control is exercised, and designated by the Administrator for the purpose of providing controlled airspace to encompass the flight paths of aircraft in transit between control zones and control areas, or between a control area and an uncontrolled airport, or between different airway route structures or segments. Transition areas shall extend upwards from a base at 700 feet above the surface until such base is otherwise designated at 1,200 feet or more above the surface. Unless otherwise limited, a transition area shall extend upwards to the base of the overlying controlled airspace."

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

D. D. Thomas

Director, Bureau of Air Traffic Management

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