UNITED STATES OF AMERICA
CIVIL AERONAUTICS BOARD
WASHINGTON, D. C.

Civil Air Regulations Amendment 60-14
Effective: January 1, 1960
Adopted: December 29, 1958

AIR TRAFFIC RULES

DEFINITION OF CONTROL AREAS

Part 60 of the Civil Air Regulations comprises the air traffic rules and contains definitions pertaining thereto, one of which is "control area." Currently, the definition of control area specifies that such area extends "...upward from an altitude of 700 feet above the surface...."

In Civil Air Regulations Draft Releases Nos. 57-11 and 57-27 the Bureau of Safety gave notice of proposals to amend the definition of control area by raising the "floor" of such areas above the present 700 feet. The objective of the proposals was to redefine the dimensions of control area so as to provide a more reasonable balance of the airspace requirements of both the IFR and VFR users of the airspace. The notices pointed to the variance of opinions between users of the airspace as to this issue and invited comments on various possibilities. Thus the issue was posed as to whether the floor should remain at or be raised above the 700-foot level up to a fixed level of 3,000 feet, and whether the level should be at one fixed altitude or subject to authority in the Administrator to make specific higher designations.

In light of the comments received the Board has concluded that it should take a middle course and establish the floor at a 1,500-foot minimum with flexible authority in the Administrator to designate higher floors where practicable in light of local conditions.

All the views expressed on this matter have been carefully taken into account and the reasoning for the respective views is understood and appreciated. While it is clear that an increase in the control area floor would create limitations for the IFR user it is equally clear that the minimum of 700 feet no longer provides adequately for the non-IFR user.

The Board is of the opinion that the floor of the control area should be raised to a higher minimum altitude. This floor will be at 1,500 feet; however, in recognition of the fact that the requirements for minimum flight altitudes for use under IFR may be higher than 1,500 feet in certain areas, this new definition permits the Administrator to raise the 1,500-foot floor where practicable to a higher altitude.

Raising the floor of a control area has a serious effect on related controlled airspace, especially in airport terminal areas. The present relationship between "control zones" and "control areas" cannot continue to exist without complementary amendments either to the definition of control zones or the creation of another term to supply the distinction between the en route, terminal maneuvering areas, and landing and take-off areas.

In the past the procedure for designating controlled airspace, other than the continental control area, employed the terms "control area," "control area extensions," and "control zone." Generally speaking, control areas are normally designated along the civil airways. The term control area extension has been used in addition to other applications to encompass all the flight paths of aircraft maneuvering in an airport terminal area. Control zones serve to provide controlled airspace down to the surface for the landing and take-off phase of flight.

A review of all the problems associated with raising the control area floor has led to the conclusion that, insofar as the present application of controlled airspace at the airport and in the terminal area is concerned, no increase in the floor can be made without imposing severe and undue restrictions on IFR traffic. However, flights en route along the airways can absorb the loss of controlled airspace with a less adverse effect on the over-all system capacity.

These factors led to the conclusion that, if control zones remain substantially as they are and specific provision is made to provide for controlled airspace extending upwards from 700 feet to encompass all flight paths of aircraft maneuvering in a terminal area, the 1,500-foot "floor" of control area can be implemented and utilized in the most effective manner.

While the term control area extension has been used in a number of cases so as to provide the controlled airspace requirements in terminal areas, it is not entirely suitable for this particular requirement. It is believed more advisable to prescribe a new controlled airspace term which would serve the sole purpose of providing the terminal area controlled airspace requirements and the descriptive phrase "terminal control area" appears to be most suitable.

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This revised structure will provide essentially for three segments of controlled airspace which can be classified into the en route, the terminal, and the landing and take-off phases of flight. For en route aircraft, the floor of the control area will be 1,500 feet. Additionally, this amendment provides that the Administrator may fix the floor at a higher altitude when he finds such higher altitude will not unduly restrict the flow of IFR air traffic. In an airport terminal area, where aircraft may be maneuvering at the lower altitudes, the floor of a terminal control area will be 700 feet. In the immediate vicinity of particular airports where aircraft will be landing and taking off, the control zone will continue to provide controlled airspace down to the surface. More simply, the floor of the controlled airspace structure will be 1,500 feet (or higher where the Administrator so designates) for the en route phase of flight; 700 feet in terminal areas; and, down to the surface in the vicinity of airports.

These changes when put into effect will provide that uncontrolled VFR traffic may be operated clear of clouds with one mile visibility below 700 feet when operating beneath a terminal control area and below 1,500 feet when operating below a control area when such control area is outside the terminal control area or a control zone. Under current procedure a minimum separation of at least 300 feet is provided between an aircraft operating IFR in a control area and a VFR aircraft operating beneath due to the fact that a VFR flight may be operated at or below 700 feet while an IFR flight must be at least 1,000 feet above the surface. The current minimum vertical separation of 300 feet will continue to exist between an IFR flight in a terminal control area and a VFR flight operating beneath. However, a minimum difference of 500 feet will be provided between such aircraft in control areas or the en route airway phase of flight. This minimum difference of 500 feet will be provided in the establishment of minimum en route altitudes which will not extend below 2,000 feet above the surface along airways or other control areas that are outside terminal control areas and control zones.

Although the changes being made by this amendment have been designed to minimize the impact on our controlled airspace structure, many preparatory modifications remain which have to be completed prior to full implementation of these revised rules.

Among the major projects which these changes will necessitate is the complete analysis of the present system to insure that all minimum IFR en route altitudes in affected control areas are set at or above 2,000 feet. In some cases this will require extensive flight checking and evaluation to adjust the minimum en route altitudes both on and off airways. Another significant consideration is the requirement for adequate terminal control areas around all airports at which instrument approaches are authorized.

The Administrator is of the view that because of the nature and extent of these modifications and the machinery through which they must be processed to insure that the over-all system is properly prepared to accommodate these changes, this amendment cannot become fully effective for one year. The Administrator has advised, however, that it will be feasible to implement these revised rules in part in certain areas at an earlier date. It is clear that early utilization of the provisions of these revised rules will materially aid in providing for the better utilization of airspace.

The problems encountered in developing a segregation of certain military flight activities from routine civil flight operations, for example, would be considerably less difficult if controlled airspace could in certain cases be designated with a fixed upper limit or a higher floor. Further, it is anticipated by the Administrator that along certain airways that have a high minimum reception altitude the floor can be raised almost immediately. This would serve to provide more "elsewhere" or uncontrolled airspace which would otherwise be denied during the one year believed necessary for complete implementation.

While such a progressive implementation plan has considerable merit, it does pose the problem of having two different applications of controlled airspace in effect simultaneously. However, it is expected that the disadvantages of such a procedure can be minimized by proper notice in such publications as the Airman's Guide and by appropriate depiction on aeronautical charts. The advantages to be gained in the better utilization of airspace justify the use of the revised rules as early as the Administrator is able to implement them.

Accordingly, while the effective date of this amendment is set for January 1, 1960, provision is made for earlier implementation by the Administrator of any part of the amendment as soon as he may find such part can be effectively implemented.

These revisions require complementary changes to § 60.30. This section is being amended to include "terminal control area" and to allow flight outside controlled airspace to be conducted "clear of clouds" below 1,500 feet in lieu of the 700-foot floor previously provided.

In cases where the control area floor is raised to 1,500 feet or higher the provisions of § 60.30, "Basic VFR minimum weather conditions," as revised by this amendment shall apply. That is, if the

control area floor in a particular area is raised to 1,500 feet or higher an aircraft may then be operated VFR (outside controlled airspace) in this area "clear of clouds" below 1,500 feet. Of course, in those instances where the Administrator has not taken affirmative action to raise the floor to 1,500 feet or higher the 700-foot floor of control areas shall continue in effect until January 1, 1960.

The Board in redefining the term "controlled airspace" herein does not intend nor should its action be interpreted as intending to supersede the authority of the Administrator to designate "positive control route segments" and the other provisions of Special Civil Air Regulation No. SR-424, adopted May 28, 1958.

Interested persons have been afforded an opportunity to participate in the making of this amendment (22 F.R. 3758 and 9868), and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, the Civil Aeronautics Board hereby amends Part 60 of the Civil Air Regulations (14 CFR Part 60, as amended), effective on and after January 1, 1960, provided, that the Administrator may upon 30 days' notice make this amendment or any part thereof effective in any portion of airspace prior to this date.

1. By amending § 60.30 (a) (2) by changing the phrase "700 feet" in the two places it occurs to read "1,500 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) Terminal control area. When the flight visibility is less than 3 miles, no person shall operate an aircraft VFR within a terminal control area.

3. By amending § 60.30 (c) by changing the phrase "700 feet" in the second sentence to read "1,500 feet*".

4. By adding a note with an asterisk after the current note following § 60.30 to read as follows:

*In those instances where the Administrator has not taken action to raise the floor of control area to 1,500 feet or higher, the 700-foot floor shall continue in effect until January 1, 1960.

5. By amending the "Basic VFR Minimums" chart attached to Amendment 60-11 by adding "AND TERMINAL CONTROL AREA" after 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 "1,500 feet* or BELOW" and "ABOVE 1,500 feet*", respectively; by changing the phrase "700 feet" in footnote 2 to read "1,500 feet*"; and by adding another footnote with an asterisk at the bottom of the chart to read: "*In those instances where the Administrator has not taken action to raise the floor of control area to 1,500 feet or higher, the 700-foot floor shall continue in effect until January 1, 1960."

6. By amending § 60.60 by deleting the definitions "Continental control area," "Control area," "Control zone," and "Controlled airspace" and by adding in proper alphabetical order the following new definition:

60.60 Definitions. * * *

Controlled airspace. Controlled airspace is that airspace, designated by the Administrator as the continental control area, control area, terminal control area, or control zone, within which air traffic control service is provided. In Alaska and areas outside the continental United States, airspace designated as a control area or a terminal control area shall extend upwards without the upper limitation provided by the continental control area:

(1) Continental control area. The continental control area is an area which includes that airspace within the continental United States at and above 24,000 feet (mean sea level), exclusive of prohibited and restricted areas. The continental control area shall not include the airspace over Alaska.

(2) Control area. A control area and any extension thereto is an airspace of defined dimensions extending upwards from an altitude of 1,500 feet* above the surface or higher as designated by the Administrator. A control area shall extend upwards to the base of the continental control area unless otherwise limited by the Administrator. Control areas are normally designated along airways and other segments of airspace required for en route and other traffic control service and protection.

*In those instances where the Administrator has not taken action to raise the floor of control area to 1,500 feet or higher, the 700-foot floor shall continue in effect until January 1, 1960.

(3) Terminal control area. A terminal control area is an airspace of defined dimensions extending upwards from 700 feet above the surface to the base of a control area. In the absence of an overlying control area, a terminal control area shall extend upwards to the base of the continental control area unless otherwise limited by the Administrator. Terminal control areas are intended to encompass the flight paths of aircraft maneuvering in the vicinity of an airport.

(4) Control zone. A control zone is an airspace of defined dimensions extending upwards from the surface to include one or more airports. Control zones are intended to encompass the flight paths of aircraft during take-off and landing and are normally a circular area of 5 miles radius with an extension along the instrument approach path.

(Sec. 205 (a), 52 Stat. 984; 49 U.S.C. 425 (a). Interpret or apply Sec. 601, 52 Stat. 1007, as amended; 49 U.S.C. 551)

By the Civil Aeronautics Board:

/s/ Mabel McCart

Mabel McCart
Acting Secretary

(SEAL)

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