Federal Aviation Agency

Washington, D.C.

Civil Air Regulations, Part 60

AIR TRAFFIC RULES

Supplement No. 4, CAR 60 dated May 15, 1961 **November 1, 1961**

SUBJECT: Amendments Nos. 1 to Special Civil Air Regulations Nos. SR-424C and SR-444.

Special Civil Air Regulations Nos. SR-424C and SR-444, affecting Civil Air Regulations, Part 60, were amended by the Administrator on October 23, 1961. SR-424C is amended effective December 1, 1961, and SR-444 is amended effective March 1, 1962; both amendments appeared in the Federal Register on October 27, 1961 (26 F.R. 10096).

SR-424C will now require a coded radar beacon transponder, having a Mode 3/A 64 code capability, for flight within positive control areas. SR-444 will now require a coded radar beacon transponder, having a Mode 3/A 64 code capability, for flight in radar jet advisory areas unless prior authorization has been granted by Air Traffic Control to operate in these areas without a coded radar beacon transponder.

These amendments are forwarded in advance of their effective dates to afford public notice of their provisions and should be inserted in the publication as they become effective.

CAM 60, appendix A is revised to correct the listed address of the General Aviation District Office, Van Nuys, California, and this revision should be inserted immediately.

Remove the following pages:	*Insert the following new pages:*
17 through 20	17 through 20
41 through 44	41 through 44
85 and 86	85 and 86

D. D. Thomas

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

Attachment.

SPECIAL CIVIL AIR REGULATION NO. SR–424C

(As amended by Amendment No. 1, issued October 23, 1961; effective December 1, 1961)

Effective: August 30, 1960
Issued: July 25, 1960

Positive Air Traffic Control Areas; Positive Air Traffic Control Routes

Draft Release No. 60–9, published in the Federal Register on May 7, 1960 (25 F.R. 4082) gave notice that the Federal Aviation Agency had under consideration the adoption of a Special Civil Air Regulation establishing a new and additional application of the positive air traffic control concept. It has been long recognized that there are certain areas wherein the problems of collision avoidance by high-speed flight operations require the application of air traffic control separation standards regardless of the meteorological conditions. While the positive control routes, established in Special Civil Air Regulation series 424, and the civil jet radar flight following and advisory program were designed to reduce the possibility of mid-air collision, these programs were concerned primarily with the requirements of point-to-point flight. It is axiomatic that the next step in the evolution of positive control would be to the provision of such service within a specified "area," while still retaining the "route" concept of positive control and the civil jet advisory service until superseded by the "area" concept.

All comments received in response to Draft Release No. 60–9 have been reviewed and due consideration has been given to their content. While all of the comments endorsed the concept, some did so with certain reservations.

The Department of the Air Force has recommended that a plan for the evaluation of the positive control area concept be developed and that a simulation study and evaluation of the control procedures to be used and the traffic in the affected area be completed prior to the final rule making action. The Agency intends to evaluate and analyze the positive control program and to prepare a report, available to interested persons or agencies, after the implementing phase of the program is accomplished. Knowledge and statistics gathered will provide the Agency with information upon which future expansion of the positive control program and modification of associated control procedures will be based. A simulation study of the procedural and traffic factors contingent with this program has been completed. While a formal report is not yet available, the preliminary evaluation substantiates the ideology of the positive control area concept. Further knowledge must be obtained from a practical application.

The Air Force has also recommended that the positive control routes underlying positive control areas not be expanded vertically to include the airspace between 22,000 and 24,000 feet, m.s.l. This recommendation cannot be accepted. To leave a narrow strata of nonpositive controlled airspace between the positive control route segments and the positive control area would compress nonparticipating flight activities into the airspace between the two positive control systems. This funneling of traffic into a constricted band of

airspace in conjunction with aircraft transiting from one positive control environment to the other, would create a hazardous situation. For this reason it has been concluded that the airspace between 22,000 and 24,000 feet, m.s.l., should be designated as a positive control route segment.

The Air Force has contended that certain military flight operations cannot be satisfactorily conducted within positive control airspace and has enumerated such activities in its comments. The Agency had previously informed the Air Force of its program to integrate these operations into the system in accordance with a three-phase plan. Complete integration was scheduled to be accomplished within an estimated six-month period. The Air Force has stated that a delay in accepting these operations in the system could compromise its operations to the extent that the over-all combat readiness of certain commands and units could not be maintained. The Agency has therefore revised the phasing schedule to shorter periods of time and is, in fact, prepared to accept at the inception of the program, several operations which had been scheduled for later phases. The problems are primarily procedural in nature and resolution lies in increased system capacity. The Agency is confident that most of these problems will be resolved prior to or shortly after the initiation of this positive control program.

One foreign air carrier company expressed concern regarding the requirement for a radar beacon transponder, not wishing to install such equipment in the absence of internationally accepted transponder specifications. Due to the limitations of primary radar, particularly in regard to resolution of target information from certain aircraft types, the use of radar beacon transponders is essential to the success of positive control on an area basis.

Certain language in the proposed rule has been modified to promote clarity. Paragraph 1(d) now states that the Director, Bureau of Air Traffic Management, or his designated air traffic control representative, has the responsibility for the issuance of special authorizations permitting deviations from the requirements of paragraph 1 (b) and (c). As this change is clarifying in nature, makes no substantive change and imposes no additional burden on any person, further rule making procedures thereon are unnecessary.

Draft Release No. 60–9, discussed in considerable detail the airspace within which the proposed implementation of the positive control service would be accomplished. This elaboration was necessary in order to convey to the public a comprehensive understanding of the Agency's intent. Since formal airspace notices of proposed rule making relative to this airspace have been or will be presented for comment, further discussion with respect to the exact dimensions of airspace is not considered pertinent to this document.

In cooperation with all airspace users, the Federal Aviation Agency is making every effort to develop a program for positive control which will best serve the interest of the public. It is believed that with the adoption of this regulation a major advancement in safety will be achieved. It is extremely important that all interested persons exert a concerted effort to promote the success of this endeavor. Through a continuing evaluation and modification of procedures or operations and in close coordination with all users, an orderly and practical expansion of this concept will be accomplished.

In consideration of the foregoing, the following Special Civil Air Regulation is hereby adopted to become effective on August 30, 1960.

(1) The special air traffic rules prescribed in this section shall be applicable, except as otherwise provided in paragraph (d), to any operation of an aircraft in that portion of airspace in the continental control area which has been designated by the Administrator as a "positive control area" in Part 601 of the Administrator's Regulations (14 CFR Part 601):

(a) No person shall operate an aircraft within a positive control area without prior approval of air traffic control.

(b) All VFR flight activities, including VFR on top, irrespective of weather conditions, are prohibited from operating in this designated airspace.

(c) All aircraft operated within positive control areas shall:

(1) Have instruments and equipment required for IFR operations and pilots of such aircraft shall be rated for instrument flight.

[(2) Be equipped with a coded radar beacon transponder, having a Mode 3/A 64 code capability, which shall be operated to reply to Mode 3/A interrogation with the code specified by air traffic control; *Provided*, That in the event a radar beacon transponder failure is experienced in flight, air traffic control may approve operation within positive control area.[1]]

(3) Be equipped with radio equipment capable of providing direct pilot-controller communications on the frequencies specified by air traffic control for the positive control area in which flight is conducted.

(d) The Director of the Bureau of Air Traffic Management or his designated representative may authorize deviation from the requirements of paragraphs (b) and (c) of this section in accordance with the terms and conditions of such authorization. [2]

(2) The special air traffic rules prescribed in the following paragraphs of this section shall be applicable to any operation of an aircraft in that portion of a federal airway, designated by the Administrator as a "positive control route segment" in Part 601 of the Administrator's Regulations (14 CFR Part 601), between the altitudes of 17,000 and 22,000 feet (m.s.l.); or between the altitudes of 17,000 to 24,000 feet (m.s.l.) for the portion of a "positive control route segment" underlying a "positive control area" with a base of 24,000 feet (m.s.l.).

(a) No person shall operate an aircraft within such designated airspace without prior approval of air traffic control.

(b) All VFR flight activities, including VFR on top, irrespective of weather conditions, are prohibited from operating in this designated airspace.

(c) All aircraft operated within this designated airspace shall have the instruments and equipment currently required for IFR operations and all pilots shall be rated for instrument flight.

SR–424B is hereby rescinded on the effective date of this regulation.

[1 Mode A is identical to military Mode 3. For purposes of brevity and clarity, it is referred to herein as Mode 3/A.]

[2] Requests for such authorization shall be presented, in writing, to the air route traffic control center exercising control over the positive control area within which the deviating flight will be conducted. Such request must reach the center at least 4 days in advance of the proposed operation. Approval will be conveyed in writing and may be granted on a continuing basis or by individual flight, whichever is more appropriate.

SPECIAL CIVIL AIR REGULATION NO. SR-444

(As amended by Amendment No. 1, issued October 23, 1961; effective March 1, 1962)

Effective: February 14, 1961
Issued: January 9, 1961

Jet Advisory Areas

Draft Release No. 60-2, published in the Federal Register on January 15, 1960 (25 F.R. 610) gave notice that the Federal Aviation Agency proposed the adoption of a Special Civil Air Regulation establishing jet advisory areas and certain requirements for flight therein.

With the advent of commercial turbojet air carrier operations in the United States, procedures were adopted to provide an increased measure of flight safety for such operations. Through the cooperation of the Air Defense Command of the Department of the Air Force, selected long-range radar facilities of that Command were jointly used and the Federal Aviation Agency provides flight following and traffic advisory service to United States turbojet air carrier flights as well as to some aircraft of foreign registry. This service does not provide positive separation. It does, however, provide an increased degree of safety by advising pilots of the presence of other aircraft and by providing guidance with respect to the most effective manner to avoid collision.

Comments received in response to the draft release reflected general endorsement of the principles of the proposal, but recommended some modifications.

The proposal would require that air carrier turbojet aircraft operating within the continental control area and engaged in the carriage of passengers in scheduled air transportation be flown within airspace designated as a "jet advisory area." A jet advisory area would be a designated area of airspace within which special operating rules apply to enhance the safety of air carrier turbojet flight. Such rules would require that air carrier turbojet aircraft be operated in accordance with the Instrument Flight Rules of Part 60 of the Civil Air Regulations during all flight above 24,000 feet within the continental control area. They would also require that all air carrier turbojet aircraft be equipped with a functioning radar beacon transponder. It has since been determined that these provisions, bearing solely upon scheduled air carrier operations, should not be made a part of the Air Traffic Rules but should become a part of the regulations governing air carrier operations. For this reason, the proposed more restrictive operating rules, applicable solely to air carrier operations, do not appear in the final rule.

The International Air Transport Association (IATA) supported the proposed amendment but expressed concern with respect to the effective date of the requirement for a radar beacon transponder. Their problem stems from contemplated changes in internationally acceptable equipment specifications for the radar beacon transponders. The IATA has recommended that the effective date of the radar transponder equipment requirement for foreign air carrier turbojet aircraft be established at a date sufficiently in the future to permit international agreement on the matter as well as to provide an adequate period of time for installation of equipment after such agreement is reached. The

Agency has concluded that the IATA recommendation is reasonable and valid and any future regulation will provide a reasonable period of time for equipment installation after international radar beacon transponder equipment specifications are resolved.

The Department of the Air Force acknowledged the necessity of the proposed rules, but did not concur with the proposed lateral dimensions of the jet advisory areas or with the extension of the nonradar jet advisory areas. In its comment, the Department of the Air Force contended that the establishment of jet advisory areas, 32 miles in width, would result "in a 60 percent increase in separation criteria." It states that no formal agreement to increase the current standards with respect to the jet routes has been reached, nor have statistics been developed to establish that such an increase is either necessary or desirable. The Department of the Navy also objected to expansion of nonradar jet advisory areas to flight levels 370–390.

Radar advisory areas, which comprise 90 percent of the airspace affected, are now 40 miles wide and such width will be reduced a minimum of 8 miles by the implementation of the rule. With regard to the expansion of nonradar advisory areas, which are presently 20 miles wide and exist only at flight levels 270–310, inclusive, the Agency recognizes that the number of such areas should be reduced insofar as possible. It is anticipated that such a reduction will result from the utilization of new flight checking procedures which will permit the establishment of radar advisory areas with a floor in excess of 24,000 feet. Thus, the overall effect will be to reduce the airspace within which the new rules will apply.

Certain language contained in the proposal has been modified to more clearly state the intent of the rule. Paragraphs 2 (a) and (b) now clearly state that radar and nonradar jet advisory areas will not have dimensions in excess of 16 statute miles on either side of specified jet routes. The applicability paragraph has been revised to more clearly indicate the scope of the rule. It is emphasized that this regulation does not affect flight advisory areas located outside the continental control area.

In consideration of the foregoing, the following Special Civil Air Regulation is hereby adopted to become effective on February 14, 1961.

JET ADVISORY AREA RULES

1. *Applicability.* The air traffic rules contained in this regulation shall apply to the operation of all aircraft in jet advisory areas located within the continental control area.

2. *Jet advisory areas.* As used in this regulation, the term "jet advisory areas" means airspace so designated in the Regulations of the Administrator, within which the air traffic rules contained in this Special Civil Air Regulation apply for the purpose of providing additional traffic advisory service for U.S. and foreign scheduled air carrier aircraft.[1]

(a) Nonradar jet advisory areas have a lateral dimension of not more than 16 statute miles on either side of specified jet routes between flight levels 270 and 310, inclusive, and 370 and 390, inclusive.

[1] Jet advisory areas (radar and nonradar) are also depicted on Flight Information Publication—"En Route—High Altitude (U.S.)" published by the Aeronautical Chart and Information Center, Air Photographic and Charting Service (MATS), USAF, Second and Arsenal Streets, St Louis 18, Missouri, and on the U.S. Coast and Geodetic Survey Radio Facility Chart entitled—"High Altitude—En Route," compiled and printed in Washington, D.C., by the U.S. Department of Commerce.

(b) Radar jet advisory areas have a lateral dimension of not more than 16 statute miles on either side of specified jet routes between 24,000 feet mean sea level and flight level 390, inclusive.

(c) Terminal radar jet advisory areas are those areas between 24,000 feet mean sea level and flight level 390, inclusive, designated to provide for the arrival and departure requirements of major air terminals.

3. *Operating rules.* In addition to the air traffic rules of Part 60, the following rules apply to any aircraft when operated within jet advisory areas in accordance with VFR, or in accordance with IFR, when cleared to maintain "VFR conditions" or "VFR conditions on top."

[(a) *In radar jet advisory areas.* (i) Pilots of aircraft equipped with a coded radar beacon transponder, having a Mode 3/A 64 code capability, shall operate the transponder to reply to Mode 3/A interrogation with the code specified by air traffic control.[2]

[(ii) Pilots of aircraft not equipped with a functioning coded radar beacon transponder, having a Mode 3/A 64 code capability, shall obtain specific prior authorization from air traffic control, except that flights unable to obtain authorization because of radio failure may transit jet advisory areas by maintaining the appropriate VFR cruising flight level specified in section 60.32 of the Civil Air Regulations.]

(b) *In nonradar jet advisory areas.* All aircraft, including those equipped with a functioning radar beacon transponder, shall obtain specific authorization from air traffic control prior to operating within the area of nonradar coverage of a jet advisory area.

[[2] Mode A is identical to military Mode 3. For purposes of brevity and clarity, it is referred to herein as Mode 3/A. Mode 3/A requirements and other detailed operational procedures for the radar beacon transponder are published in the Airman's Guide and are also depicted on Flight Information Publication—"En Route—High Altitude (U.S.)" and U.S. Coast and Geodetic Survey Radio Facility Chart—"High Altitude—En Route."]

REGION 4

FAA Regional Office: 5651 W. Manchester Ave., Los Angeles, Calif.
Mailing address: P.O. Box 90007, Airport Station, Los Angeles 45, Calif.
Telephone: ORchard 2-5041

No.	City	Address	Telephone
		GENERAL AVIATION DISTRICT OFFICES	
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5	Denver, Colo	District Office Bldg., Stapleton Airfield, Denver 7, Colo.	DExter 3-5473.
6	Phoenix, Ariz	2800 Sky Harbor Blvd., Sky Harbor Airport, Phoenix, Ariz.	BRidge 5-6276
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8	Boise, Idaho	1412 Idaho St., Boise, Idaho	2-2861.
9	Albuquerque, N. Mex	225 San Pedro Dr. NE., Albuquerque, N. Mex	AMherst 5-1539.
10	Helena, Mont	Municipal Airport, Box 1167, Helena, Mont	HIckory 2-4230.
11	Reno, Nev	Room 9, Savier Bldg., Box 499, 210 W. 2d St., Reno, Nev.	FAirview 2-3790.
12	Cheyenne, Wyo	Municipal Airport, Box 2166, 4101 Evans Ave., Cheyenne, Wyo.	6-6037.
13	Van Nuys, Calif	Van Nuys Airport, 16700 Roscoe Blvd., Van Nuys, Calif.	STate 5-8624.
14	Spokane, Wash	Box 247, Parkwater Station, Spokane, Wash	KEystone 5-1601.
15	Fresno, Calif	5444 Perimeter Rd., Fresno 27, Calif	CLinton 1-6056.
16	San Diego, Calif	3110 Goddard Ways, Lindbergh Field, San Diego 1, Calif.	CYpress 5-3112.
17	Sacramento, Calif	Municipal Airport, Sacramento, Calif	GArden 8-9614.
18	Ontario, Calif	Admin. Bldg., International Airport, Ontario, Calif	YUkon 4-2411.
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20	Long Beach, Calif	Admin. Bldg., Municipal Airport, Long Beach, Calif.	HArrison 1-8287.
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22	Medford, Oreg	Municipal Airport, Box 832, Medford, Oreg	SPring 3-4033.
23	Billings, Mont	Municipal Airport, Box 2078, Billings, Mont	CHerry 5-7910.
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34	Denver, Colo	FAA District Office Bldg., Stapleton Field, Denver 7, Colo.	DExter 3-5475.
35	Seattle, Wash	P.O. Box 17, FAA Bldg., Boeing Field, Seattle, Wash.	PArk 3-5604.

No.	City	Address	Telephone
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42	Santa Monica, Calif	c/o Douglas Aircraft Co., Inc., 3009 Ocean Park Blvd., Santa Monica, Calif.	EXbrook 6–8719, UPton 0–1211, Ext. 3821.
43	Burbank, Calif	c/o Lockheed Aircraft Corp., Plant A–1, Bldg. 19, Burbank, Calif.	TRiangle 7–3614, TRiangle 7–2711, Ext. 1324.
46	Seattle, Wash	Box 17, Boeing Field, Seattle 8, Wash	PArkway 3–2564
48	Long Beach, Calif	c/o Douglas Aircraft Co., Inc., Location C–8, Bldg. 83, 3855 Lakewood Blvd., Long Beach, Calif.	HArrison 1–2494.

City	Address	Telephone
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Seattle, Wash	P.O. Box 18, Boeing Field Seattle 8, Wash	PArkway 3–8440.
Spokane, Wash	S. 3905 Davidson Blvd., Spokane 82, Wash	TEmple 8–8092.
Denver, Colo	FAA District Office Building, Stapleton Airfield, Denver, Colo.	FLorida 5–0765.
Salt Lake City, Utah	P.O. Box 22, Airport Station, Salt Lake City 16, Utah	EMpire 4–7641.
Phoenix, Ariz	Sky Harbor Airport, 2800 Sky Harbor Blvd., Phoenix, Ariz.	BRidge 5–6701
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Salt Lake City, Utah	P.O. Box 1, Airport Station, Salt Lake City, Utah	EMpire 4–1126.

U. S. GOVERNMENT PRINTING OFFICE : 1961 O - 617955