Federal Aviation Agency

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Civil Aeronautics Manual 42

Irregular Air Carrier and Off-Route Rules

Supplement No. 5, CAM 42 dated Feb. 15, 1960 **February 1, 1962**

SUBJECT: Revisions to CAM 42.

This supplement is issued to incorporate into CAM 42 Civil Air Regulations Amendments 42-34, 42-35, 42-36, 42-37, and Special Civil Air Regulation No. SR-436B.

Amendment 42-34 concerns the boarding of air carrier aircraft by persons appearing to be intoxicated. It was issued October 17, 1961, to become effective November 21, 1961.

Amendments 42-35, 42-36, and 42-37 concern the carriage of cargo in passenger compartments. Amendment 42-35 was issued November 27, 1961, to become effective January 2, 1962. Amendment 42-36 postponed the effective date of Amendment 42-35 to January 20, 1962. Amendment 42-37 rescinded Amendment 42-35 and contained revised requirements concerning the carriage of cargo in passenger compartments.

Special regulation SR-436B concerns airborne weather radar equipment requirements for airplanes carrying passengers. This regulation was issued December 28, 1961, to become effective January 5, 1962, and supersedes Special Civil Air Regulation No. SR-436A.

New or revised material is enclosed in black brackets on the pages submitted with this supplement, except Special Civil Air Regulation No. SR-436B, and the pages in the addendum containing the preamble of amendments.

Remove the following pages:	*Insert the following new pages:*
V through VIII	V through VIII
55 and 56	55 through 56-1
231 through 233	231 through 233
P-37	P-37 through P-41

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Addendum

Preambles of Amendments to Part 42	P–1

beverage to any person aboard an air carrier aircraft if such person appears to be intoxicated.

[(c) No air carrier shall permit any person to board an air carrier aircraft if such person appears to be intoxicated.

[(d) An air carrier shall report to the Administrator within 5 days any incident in which a person aboard its aircraft refuses to comply with paragraph (a) of this section, or any disturbance caused by a person who appears to be intoxicated while aboard its aircraft.]

(Amendment 42-26, published in 25 F.R. 170, Jan. 9, 1960, effective Mar. 10, 1960; [Amendment 42-34, published in 26 F.R. 9907, Oct, 21, 1961, effective Nov. 21, 1961.])

[*42.66 Carriage of cargo in passenger compartments.* Cargo shall not be carried in the passenger compartment of an airplane except as provided in either paragraph (a) or (b) of this section.

[(a) Cargo carried aft of the foremost seated passengers shall be carried in an approved cargo bin. Approved cargo bins shall meet the requirements of subparagraphs (1) through (8) of this paragraph.

[(1) The bin shall be capable of withstanding the load factors and emergency landing conditions applicable to the passenger seats of the airplane in which the bin is installed multiplied by a factor of 1.15. The combined weight of the bin and the maximum weight of cargo which may be carried in the bin shall be used to determine this strength.

[(2) The maximum weight of cargo which the bin is approved to carry and any instructions necessary to insure proper weight distribution within the bin shall be conspicuously marked on the bin.

[(3) The bin shall not impose any load on the floor or other structure of the airplane which exceeds the structural load limitations of such components.

[(4) The bin shall be attached to the seat tracks or to the floor structure of the airplane, and its attachments shall withstand the load factors and emergency landing conditions applicable to the passenger seats of the airplane in which the bin is installed multiplied by either the factor 1.15 or the seat attachment factor specified for the airplane, whichever is greater. The combined weight of the bin and the maximum weight of cargo which may be carried in the bin shall be used to determine this strength.

[(5) The bin shall not be installed in a position which restricts access to or use of any required emergency exit, or the use of the aisle in the passenger compartment.

[(6) The bin shall be fully enclosed and constructed of material which is at least flame resistant.

[(7) Suitable safeguards shall be provided within the bin to prevent the cargo from shifting under emergency landing conditions.

[(8) The bin shall not be installed in a position which obscures any passenger's view of the "seat belt" or "no smoking" sign, nor shall any required exit sign be blocked from view, unless an auxiliary sign or other approved means for proper notification of such passenger is provided.

[(b) Cargo carried forward of the foremost seated passengers shall be carried either in approved cargo bins as specified in paragraph (a) of this section, or in accordance with the following requirements:

[(1) It shall be properly secured by means of safety belts or other tiedowns having sufficient strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions;

[(2) It shall be packaged or covered in a manner to avoid possible injury to passengers;

[(3) It shall not impose any load on seats or the floor structure which exceeds the structural load limitation for those components;

[(4) It shall not be located in a position which restricts the access to or use of any required emergency or regular exit, or the use of the aisle in the passenger compartment; and

[(5) It shall not be located in a position which obscures any passenger's view of the "seat belt" or "no smoking" sign, nor shall any required exit sign be blocked from view, unless an auxiliary sign or other approved means for proper notification of such passenger is provided.

[(Amendment 42-35, published in 26 F.R. 11356, Dec. 1, 1961, effective Jan. 2, 1962; Amendment

42-36, published in 26 F.R. 12762, Dec. 30, 1961, effective Jan. 2, 1962; Amendment 42-37, published in 27 F.R. 651, Jan. 23, 1962, effective Jan. 20, 1962.)]

Operating Limitations for Large Passenger-Carrying Airplanes

42.70 *Operating limitations for transport category airplanes.*

(a) In operating any passenger-carrying transport category airplane the provisions of sections 42.71 through 42.78 shall be complied with unless deviations therefrom are specifically authorized by the Administrator on the ground that the special circumstances of a particular case make a literal observance of the requirements unnecessary for safety.

(b) For transport category aircraft the data contained in the Airplane Flight Manual shall be applied in determining compliance with these provisions. Where conditions differ from those for which specific tests were made, compliance shall be determined by interpolation or by computation of the effects of changes in the specific variables where such interpolations or computations will give results substantially equalling in accuracy the results of a direct test.

(c) No airplane shall be taken off at a weight which exceeds the allowable weight for the runway being used as determined in accordance with the takeoff runway limitations of the transport category operating rules, after taking into account the temperature operating correction factors required by sections 4a.749a-T or 4b.117 of this subchapter, and set forth in the Airplane Flight Manual for the airplane.

42.70-1 *Deviations (FAA rules which apply to sec. 42.70 (a)).* An application for any deviation shall include all supporting data and shall be forwarded to the district office charged with the over-all inspection of the air carrier's operations.

(Published in 19 F. R. 2168, Apr. 15, 1954, effective Apr. 25, 1954; amended effective June 15, 1957.)

42.70-2 *Accuracy of data (FAA policies which apply to sec. 42.70 (b)).* The charts and data prepared by the air carrier for use of flight and operations personnel should be prepared with sufficient accuracy and clarity that the gross weight and runway length values for specific operating conditions can be reproduced within a tolerance of one-half of 1 percent by an independent recheck.

(Published in 19 F. R. 2168, Apr. 15, 1954, effective Apr. 25, 1954.)

42.70-3 *Temperature accountability (FAA policies which apply to sec. 42.70 (c)).* The maximum permissible weight for a given takeoff should be equal to the lowest of three values determined separately by consideration of (a) accelerate-stop, (b) takeoff and climb out to a 50-foot height and (c) the obstacle clearance condition. The established temperature accountability correction factors appearing in the Airplane Flight Manuals are applied to the takeoff weights determined by the accelerate-stop and climb out to a 50-foot height. These values may be used individually or in combination, i. e., if a runway is considerably longer than is required to meet the accelerate-stop and climb out to 50-foot requirements at standard temperature, then at temperatures higher than standard, takeoff weight need not be reduced as long as additional runway length is available. When the temperature reaches a value at which no additional runway length remains, then a reduction in weight would be necessary. These factors do not apply to weights determined by obstacle clearance considerations. If the takeoff weight at standard temperature is limited by obstruction clearance rather than by the climb out to 50 feet or by the accelerate-stop distance, a weight reduction need not be made for temperatures higher than standard until the temperatures reach a high enough value to use up the existing runway between that used for standard temperature (limited to less than the full runway because of obstacles) and the actual length.

(Published in 19 F. R. 2168, Apr. 15, 1954, effective Apr. 25, 1954.)

42.71 *Weight limitations.*

(a) No airplane shall be taken off from any airport located at an elevation outside of the altitude range for which maximum takeoff weights have been determined, and no airplane shall depart for an airport of intended destination, or have any airport specified as an alternate, which is located at an elevation outside of the altitude range for which maximum landing weights have been determined.

(b) The weight of the airplane at takeoff shall not exceed the authorized maximum takeoff weight for the elevation of the airport from which the takeoff is to be made.

(c) The weight at takeoff shall be such that, allowing for normal consumption of fuel and oil in flight to the airport of intended destination, the weight on arrival will not exceed the authorized maximum landing weight for the elevation of such airport.

42.71–1 *Weight limitations (FAA policies which apply to sec. 42.71).* The limitations imposed by section 42.71 take into account only one operating variable, i. e., the elevation of the airport to be used as it affects the weight of the aircraft during takeoff or landing. Other operating variables, such as runway length, gradient, wind and temperature, are considered in other sections of this part. Compliance with this section does not present a particular problem since the Airplane Flight Manual provides performance data for airports over a wide range of elevations. However, most manuals do not provide data for operations at airports below sea level. Section 42.71 should not be construed as prohibiting operations from airports below sea level, since sea level data in the Airplane Flight Manual, being conservative, may be applied to such airports.

(Published in 19 F. R. 2168, Apr. 15, 1954, effective Apr. 25, 1954.)

42.72 *Takeoff limitations to provide for engine failure.* No takeoff shall be made except under conditions which will permit compliance with the following requirements:

(a) It shall be possible, from any point on the takeoff up to the time of attaining the critical-engine-failure speed, to bring the airplane to a safe stop on the runway, as shown by the accelerate-stop distance data.

(b) It shall be possible, if the critical engine should fail at any instant after the airplane attains the critical-engine-failure speed, to proceed with the takeoff and attain a height of 50 feet, as indicated by the takeoff path data, before passing over the end of the takeoff area. Thereafter, it shall be possible to clear all obstacles, either by at least 50 feet vertically, as shown by the takeoff path data, or by at least 200 feet horizontally within the airport boundaries and by at least 300 feet horizontally after passing beyond such boundaries.

(1) In determining the allowable deviation of the flight path in order to avoid obstacles by at least the distances above set forth, it shall be assumed that the airplane is not banked before reaching a height of 50 feet, as shown by the takeoff path data, and that a maximum bank thereafter does not exceed 15°.

(c) In applying the requirements of paragraphs (a) and (b) of this section, corrections shall be made for any gradient of the takeoff surface. To allow for wind effect, takeoff data based on still air may be corrected by not more than 50 percent of the reported wind component along the takeoff path if opposite to the direction of takeoff, and shall be corrected by not less than 150 percent of the reported wind component if in the direction of takeoff.

42.72–1 *Takeoff limitations to provide for engine failure (FAA policies which apply to sec. 42.72).*

(a) *Takeoff flight path.* Diagram 1 is a pictorial representation of the relationship required between the dimensions of an airport and its surroundings, and the performance of the airplane. It illustrates the takeoff flight path defined by the airworthiness requirements.

(b) *Airport data.* Complete data concerning the airport dimensions and characteristics, such as runway lengths, runway gradients, obstruction heights and location, airport elevation, and the nature and condition of airport areas other than paved runways from which takeoffs might be made, are necessary for the determination of permissible takeoff weights. The most nearly complete and satisfactory source of such data is the series of Airport Obstruction Plans prepared by the United States Department of Commerce Coast and Geodetic Survey. However, their Airport Obstruction Plan series does not yet completely cover the airports used by air carrier operators of Transport Category airplanes, and in addition, the Obstruction Plans do not present any data showing the nature or condition of runway surfaces or other airport areas suitable for use in takeoff and landing. Furthermore, the Obstruction Plans necessarily contain data which may be several months old and which may not completely conform to the existing obstructions. There-

SPECIAL CIVIL AIR REGULATION NO. SR-436B

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Airborne Weather Radar Equipment Requirements for Airplanes Carrying Passengers

Special Civil Air Regulation No. SR-436A (25 F.R. 6130), which superseded SR-436 (25 F.R. 167), requires the installation of approved airborne weather radar equipment in certain transport category airplanes used for the carriage of passengers under Part 40, 41, or 42 of the Civil Air Regulations. This requirement is based on the fact that airborne weather radar equipment facilitates the early detection and location by the pilot of certain areas of turbulence and enables him to avoid such areas or to take such other action as may be necessary in the interest of safety.

Section 4 of SR-436A expressly excepts from the provisions of the regulation airplanes used solely within the States of Alaska and Hawaii. These operations were excluded because thunderstorms and other potentially hazardous meterological conditions detectable by weather radar rarely occur in those areas.

Recently, the Federal Aviation Agency received a request from an air carrier operating in the State of Alaska to amend section 4 of SR-436A to expand the exceptions contained in that section to include certain areas of the Dominion of Canada. In support of its request the air carrier points out that because of the physical shape of the State of Alaska, the use of airways which overfly northwest Canada provide a more direct route between northeast Alaska and southeast Alaska. Moreover, when operating over the Canadian Airways Dawson and Whitehorse, Yukon Territory, Canada, are ideally located and suitably equipped to provide refueling service. However, when carrying passengers under the provisions of Part 41 or 42, compliance with the present provisions of SR-436A prevents the use of both the more direct airways over Canada and the Canadian refueling stops unless approved airborne weather radar is installed on the airplane being utilized.

At an industry meeting held in the State of Alaska, subsequent to this request, the feasibility of amending SR-436A was discussed. It was suggested at this meeting that if an amendment is made to section 4 of SR-436A it should include all of the Dominion of Canada west of a north-south line which would encompass the city of Edmonton, Alberta, Canada. This would include all of Canada west of longitude 110° W., between the northern coastline of Canada and the northern boundary of the continental United States. This request was based upon a contention that there is light thunderstorm activity in that part of Canada.

As a result of these requests, the Federal Aviation Agency initiated a study into the feasibility of amending section 4 of SR-436A to except airplanes operated in certain parts of Canada from the requirement of installing airborne weather radar. Information was received from the U.S. Weather Bureau that the area of Canada west of longitude 130° W., between latitude 70° N. and latitude 53° N., has meteorological conditions similar to the State of Alaska.

This information also shows that thunderstorms and other potentially hazardous meteorological conditions rarely occur in that area. However, in the area of Canada that is east and south of that area and adjacent to the United States northern boundary and which encompasses Edmonton, Alberta, the thunderstorm activity increases considerably and is equal to or greater than that of a large portion of the United States where airborne weather radar is mandatory.

After considering the foregoing, it has been determined that the level of safety in air carrier passenger operations would not be reduced by excluding from the provisions of SR–436A airplanes used for the carriage of passengers within Alaska and that portion of Canada west of longitude 130° W., between latitude 70° N. and latitude 53° N., where thunderstorms and other potentially hazardous weather conditions rarely occur. In addition, such an exclusion would permit the use of more direct routes and refueling stops between northeast and southeast Alaska. Therefore, section 4 of SR–436A is amended to exclude airplanes used within the State of Alaska and that portion of Canada west of longitude 130° W., between latitude 70° N. and latitude 53° N., from the weather radar requirements.

This Special Civil Air Regulation incorporates into one document all of the provisions of SR–436A with amendments to exclude the foregoing portions of Canada. Since it imposes no additional burden on any person and relieves a restriction, I find that notice and public procedure hereon are unnecessary, and that good cause exists for making this regulation effective on less than 30 days' notice.

In consideration of the foregoing, the following Special Civil Air Regulation is hereby adopted:

1. *Airborne weather radar equipment requirement.* After the dates specified, the following transport category airplanes shall not be used for the carriage of passengers under the provisions of Part 40, 41, or 42 of the Civil Air Regulations, unless approved airborne weather radar equipment is installed in such airplanes:

(a) July 1, 1960, for all turbine-powered airplanes certificated under the transport category rules;

(b) January 1, 1961, for the Douglas DC–7 Series, Douglas DC–6 Series, and Lockheed 1049 and 1649 Series type airplanes; and

(c) January 1, 1962, for all airplanes certificated under the transport category rules, except C–46 type airplanes.

NOTE: Airplanes subject to the provisions of paragraph (c) of this section include, but are not limited to, the following types: Boeing 377; Convair 240, 340, and 440; Lockheed 049 and 749; Martin 202 and 404; and Douglas DC–4.

2. *Schedule for installation of equipment.*

(a) Each operator conducting passenger operations under the provisions of Part 40, 41, or 42 of the Civil Air Regulations with transport category airplanes on which airborne weather radar is not installed, shall establish a schedule for the progressive completion of such radar installations, in accordance with the provisions of section 1 of this regulation. The schedule shall provide for the completion of all required radar installations on or before the dates specified in section 1 of this regulation, and the completion of at least 40 percent of the required installations on or before the following dates:

(1) August 1, 1960, for airplanes of the types specified in section 1(b), and

(2) February 1, 1961, for airplanes of the types specified in section 1(c).

(b) On or before July 1, 1960, a copy of the schedule required by paragraph (a) of this section shall be submitted to an authorized representative of the Administrator, together with a list of any airplanes the operator intends to discontinue using in the carriage of passengers prior to the date on which radar equipment must be installed.

3. *Requirement for dispatch and continuance of flight.* After the effective date specified in section 6 of this regulation, all transport category airplanes having approved airborne weather radar installed shall be operated in accordance with the following rules when used in passenger operations under Part 40, 41, or 42:

(a) *Dispatch.* No airplane shall be dispatched (or flight of an airplane started under the provisions of Part 42) under IFR or night VFR conditions when current weather reports indicate thunderstorms, or other potentially hazardous weather conditions which can be detected by airborne weather radar, may reasonably be expected to be encountered along the route to be flown, unless approved airborne weather radar equipment installed in the airplane is in a satisfactory operating condition.

(b) *En route.* In the event the airborne weather radar becomes inoperative en route, the airplane shall be operated in accordance with the instructions and procedures specified in the operations manual for such occurrence. After the date specified by section 1 of this regulation for the mandatory installation of approved airborne weather radar on the type of airplane involved, such instructions and procedures shall meet with the approval of an authorized representative of the Administrator.

4. *Exceptions.* The provisions of this regulation shall not apply to airplanes used (a) solely within the State of Hawaii or within the State of Alaska and that portion of the Dominion of Canada west of longitude 130° West, between latitude 70° North and latitude 53° North, or (b) during all-cargo, training, test, or ferry flights.

5. *Electrical power supply.* Contrary provisions of the Civil Air Regulations notwithstanding, an alternate electrical power supply need not be provided for airborne weather radar equipment.

6. *Effective date.* This Special Civil Air Regulation shall become effective on January 5, 1962, and supersedes Special Civil Air Regulation No. SR-436A.

Amendment 42–33

Landing Flare Requirements

Adopted: Sept. 15, 1961
Effective: Sept. 21, 1961
Published: Sept. 21, 1961
(26 F.R. 8882)

Section 42.21(b)(6) of the Civil Air Regulations requires that each airplane used at night for extended overwater operations be equipped with landing flares.

In 1958, a requirement for the carriage of flares in night operations over land was deleted from Part 42 by Amendment 42–13 (23 F.R. 293). This requirement was deleted because there had been very little use of flares from 1947 to 1958, and the records revealed numerous instances of flares being inadvertently discharged on the ground or in the air, causing damage to the airplane, other airplanes, ramps, and hangars. Instances were also reported of flares contributing to the intensity of a fire following a crash. The Civil Aeronautics Board, after consideration of all the facts involved, concluded that equipping an airplane with flares should not be a mandatory safety requirement for operations conducted over land at night.

The military transport services discontinued the use of flares in their passenger transport operations several years ago for reasons involving cost, maintenance, the hazard of carrying flares, and their questionable value under emergency conditions.

Recently, the Federal Aviation Agency received several requests from air carriers for relief from the flare requirement for overwater operations at night. In view of those requests, the Agency has carefully reviewed the subject of flare requirements. Consideration has been given to all of the data available to the Board in 1958 when it deleted the requirement for the carriage of flares in night operations over land. In addition, the Agency has weighed the probability of having to ditch an airplane as opposed to diverting to a land area, in view of such factors as improved airplane performance, reliability, operating range, and the development of more accurate and dependable communication aids. In this connection, we consider it significant that to our knowledge no multiengine air carrier airplane has been involved in the dropping of flares during the past 14 years. Finally, it should be pointed out that the Air Transport Association and the Air Line Pilots Association have recently advised the Agency that they favor deletion of the requirement for flares in night overwater operations.

Upon consideration of the foregoing, the Agency has concluded that flares for passenger-carrying airplanes should not be required as mandatory safety equipment for air carrier overwater operations conducted at night. Deletion of the flare requirement will not preclude the carriage of flares by an air carrier who may desire to continue carrying them as optional equipment.

Since this amendment relieves a restriction and imposes no additional burden on any person, I find that notice and public procedure hereon are unnecessary, and it may be made effective on less than 30 days' notice.

Amendment deleted section 42.21(b)(6).

Amendment 42–34

Boarding of Air Carrier Aircraft by Persons Appearing Intoxicated

Adopted: Oct. 17, 1961
Effective: Nov. 21, 1961
Published: Oct. 21, 1961
(26 F.R. 9907)

A notice of proposed rule making was published in the Federal Register August 10, 1961 (26 F.R. 7223) and circulated to the industry as Draft Release 61–16 dated August 4, 1961, which proposed to amend Parts 40, 41, and 42 of the Civil Air Regulations to (1) place on the air carrier the responsibility of not permitting any person to board its aircraft if such person appears to be intoxicated, and (2) require that the air carrier notify the Administrator of incidents involving violations of this section, or any disturbance caused by intoxicated persons while boarding or aboard its aircraft.

Many comments were received from interested parties and consideration has been given to all revelant matter presented. Generally speaking, the comments were unanimously in favor of lengthening the proposed 24-hour reporting period contained in paragraph (d). Other comments favored limiting the reporting of violations of paragraph (a) to only those incidents in which the passenger refuses to comply with its provisions. A few comments suggested that the proposed amendments were altogether unnecessary.

In proposing these amendments, the Agency considered several recent incidents where intoxicated persons were permitted to board air carrier aircraft and, due to their condition, subsequently created disturbances, and even threatened to do bodily harm to crew members and other persons aboard the aircraft. The drinking regulations adopted in March 1960, effectively control the consumption and serving of alcoholic beverages to persons aboard air carrier aircraft, but do not provide for situations such as are considered here.

Section 43.45 of the Civil Air Regulations currently provides that a pilot shall not permit any person to be carried in the aircraft who is obviously under the influence of intoxicating liquor. This provision has also served its purpose well. However, when applied to air carrier operations, this regulation has not been entirely effective to prevent incidents such as those which recently have taken place. Placing the responsibility on the pilot is not satisfactory in the case of air carrier operations since, under most conditions, the pilot is not present to observe the appearance and conduct of passengers as they board the aircraft, but is engaged elsewhere in essential duties regarding the flight.

The primary responsibility for preventing intoxicated persons from boarding air carrier aircraft must be placed on those who have an adequate opportunity to prevent the occurrence. The air carrier has both ground personnel and cabin attendants who are in a position to detect those persons who appear to be intoxicated and to refuse such persons permission to board the aircraft. The proposed amendments to Parts 40, 41 and 42 of the Civil Air Regulations place on the carrier the responsibility of not permitting any person to board its aircraft if such person appears to be intoxicated. Some air carriers have developed their own procedures and instructions to appropriate personnel in recognition of a responsibility in this area. This regulation underlines that responsibility and requires all carriers to take steps more appropriate to existing conditions. In particular it will prevent exclusive reliance on the pilot as the carrier's sole agent for this purpose. Section 43.45 is not being amended because it is always the responsibility of the pilot in command to refuse permission for the carriage of any person who is under the influence of intoxicating liquor regardless of the action taken by other airline employees if presence of such person is known to him.

Comments received in regard to the 24-hour reporting period point out that due to crew rotations, weekends and periods when the air carriers' general offices are closed, coupled with the minimum time required to process these reports, such a short period would place a serious burden on the carriers. After consideration of these circumstances, it has been decided to lengthen the reporting period to 5 days. It is felt that this allows sufficient period in which to gather the information and make the necessary report.

In response to comments other changes have been made in paragraph (d). One comment received from an air carrier points out that the rule as proposed requires the making of a report even where a passenger who was unaware of the restriction imposed by paragraph (a) complies with it upon request. It has been determined that whatever advantages might be derived by requiring such reports would be outweighed by the embarrassment and possible adverse publicity to the carrier and passenger concerned. Consequently, the paragraph has been revised to require that only those violations of paragraph (a) which persist after the passenger has been informed of its provision must be reported. Also, the phrase "under the influence of alcoholic beverage" has been changed to "appears to be intoxicated." The purpose of this change is to bring the language in paragraph (d) into conformity with that presently found in paragraphs (b) and (c).

In addition to the changes made in response to comments, the Agency has made another change in paragraph (d). The proposed rule required a report of disturbances while boarding an air carrier aircraft. Upon further consideration there does not appear any necessity for requiring a report under these circumstances. If the person is not permitted to board the aircraft there has been no safety threat involved and no necessity for a report of the incident to the Federal Government.

Amendment 42–34 added new paragraphs (c) and (d) to section 42.65.

Amendment 42-35

Carriage of Cargo in Passenger Compartments

Adopted: Nov. 27, 1961
Effective: Jan. 2, 1962
Published: Dec. 1, 1961 (26 F.R. 11356)

NOTE: The effective date of this amendment was postponed to January 20, 1962, by Amendment 42-36, adopted December 28, 1961. On January 19, 1962, Amendment 42-35 was rescinded by Amendment 42-37. The preamble of Amendment 42-35 is being retained as it contains the basic background leading to the promulgation of rules concerning the carriage of cargo in passenger compartments.

The currently effective provisions of Part 42 of the Civil Air Regulations do not provide for the carriage of cargo in the passenger compartment of an air carrier aircraft. However, the operations specifications issued to the air carriers certificated to operate under this part do authorize such carriage, subject to certain restrictions. They provide in part that cargo shall not be carried aft of seated passengers. The intent of this restriction was to safeguard passengers from any possible injury which could be caused by the shifting forward of cargo in the event the aircraft was involved in a survivable crash involving high deceleration forces. The present authorization does not recognize that this desired safeguard could be accomplished equally well by the incorporation of suitable methods of cargo stowage designed to prevent the shifting of cargo in accidents of this nature.

As a result of a request from the air carrier industry to permit the carriage of cargo in the passenger compartment in cargo bins specifically designed for this purpose, the Federal Aviation Agency issued a notice of proposed rule making which was published in the Federal Register (24 F.R. 8302) and circulated as Civil Air Regulations Draft Release No. 59-15 dated October 6, 1959, and titled "Carriage of Cargo in Passenger Compartments." This draft release proposed to amend Parts 40, 41, and 42 of the Civil Air Regulations to authorize the carriage of cargo in the passenger compartment without regard to its location with respect to seated passengers; *Provided:*

(a) The cargo is carried in approved bins which meet the strength and other safety provisions applicable to cargo and passenger compartments prescribed in Part 4b or other airworthiness part under which the aircraft is type certificated, and

(b) The combined weight of the cargo and the approved bin or compartment does not exceed 85 percent of the load used in determining the design conditions for the structure (bin) involved.

It was also proposed in Draft Release 59-15 to continue the authorization to carry cargo forward of seated passengers in the passenger compartment under practically the same provisions as are currently in effect. However, one additional requirement was proposed to be incorporated into the current provision. This requirement was that cargo not carried in approved containers or compartments must be secured by tiedowns possessing sufficient strength to eliminate the possibility of shifting under emergency landing conditions.

The comments received in response to the draft release were for the most part favorable and they reflected endorsement of the principles of the proposal. However, definite opposition was expressed in the comments with regard to the requirement that tiedowns for cargo not carried in approved bins or compartments shall possess sufficient strength to withstand the inertia forces of an emergency landing condition. It was contended that to modify the existing authorization by the addition of this requirement would prevent an operational practice which has been utilized for a number of years without adversely affecting safety. Therefore, in view of these comments, and since it was not the intent of the proposal to materially change the existing authorization but only to provide additional means of safely carrying cargo in the passenger compartment, the final rule does not contain this requirement.

It will be noted that the final rule sets forth specific minimum requirements which a cargo bin must meet to be "approved" by a representative of the Administrator. Draft Release 59-15 contained notice of the Federal Aviation Agency's intention to require the use of "approved" cargo bins but did not specify the exact requirements for the "approval." The substance of the proposed rule on cargo bin specifications provided that the cargo bin would be required to meet the strength and other safety provisions of Part 4b or other appropriate part under which the aircraft is type certificated, and that the bin would be

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considered as an item of mass for inertia force computations. After further study of these provisions it has been determined that the incorporation into the rule of specific minimum requirements for cargo bins would provide guidance to the industry and eliminate the need for additional directives by the Federal Aviation Agency on this subject. Accordingly, the final rule specifies the minimum requirements which such cargo bins must meet.

Interested persons have been afforded an opportunity to participate in the making of this regulation (24 F.R. 8302), and due consideration has been given to all relevant matter presented.

Amendment added new section 42.66.

Amendment 42–36

Carriage of Cargo in Passenger Compartments

Adopted: Dec. 28, 1961
Effective: Jan. 2, 1962
Published: Dec. 30, 1961 (26 F.R. 12762)

On November 27, 1961, the Federal Aviation Agency issued Amendment 42–35 to Part 42 of the Civil Air Regulations, (26 F.R. 11356) to become effective on January 2, 1962.

Subsequent to the issuance of this amendment, certain air carriers requested reconsideration of those provisions of the amendment restricting the height of the cargo bins which may be approved for the carriage of cargo in the passenger compartments. A preliminary reevaluation of this request indicates that the height restriction may be relaxed or eliminated without adversely affecting safety. Accordingly, in order to provide sufficient time for the completion of this reevaluation and to make other required clarifying changes, the effective date of Amendment 42–35 is being postponed from January 2, 1962, until January 20, 1962.

In view of the foregoing, I find that notice and public procedure hereon are impracticable, and good cause exists for making this amendment effective on less than 30 days' notice.

Amendment postponed the effective date of Amendment 42–35 from January 2, 1962, until January 20, 1962.

Amendment 42–37

Carriage of Cargo in Passenger Compartments

Adopted: Jan. 19, 1962
Effective: Jan. 20, 1962
Published: Jan. 23, 1962 (27 F.R. 651)

Section 42.66 of Part 42 was promulgated by Civil Air Regulations Amendment 42–35 (26 F.R. 11356) issued November 27, 1961, to become effective January 2, 1962. This section provides a means by which cargo may be safely carried in the passenger compartment of an air carrier airplane.

Subsequent to the issuance of Amendment 42–35, certain air carriers requested reconsideration of section 42.66(a)(3) of that amendment which specified that approved cargo bins installed aft of passengers shall not be higher than the height of the passenger seats on the airplane. In addition, comments were received with regard to paragraphs (a)(1) and (a)(4) which indicated a need for a clarification of the strength requirements which a cargo bin and its attachments must meet for approval.

The effective date of Amendment 42–35 was postponed from January 2, 1962, to January 20, 1962, by Amendment 42–36 (26 F.R. 12762). This postponement of the effective date was necessary to provide sufficient time for a complete reevaluation of the provisions of section 42.66(a)(3) and to make other clarifying changes.

As a result of this reevaluation it has been concluded that, regardless of its height, a properly loaded cargo bin which has been constructed and installed in the airplane to meet specific strength requirements will not adversely affect safety if it does not obscure any passenger's view of the "seat belt" or "no smoking" sign. Therefore, this amendment eliminates the height restriction for cargo bins and in lieu thereof adds provisions which (1) require proper distribution of the weight of the cargo within the bin, (2) prohibit use of bins which exceed the structural load limitation on components of the airplane, and (3) prohibit installing the bin in a location which will obscure any passenger's view of the "seat belt" or "no smoking" sign, unless an auxiliary sign, or some other approved means for notification of the passenger is provided.

The provisions of paragraphs (a)(1) and (a)(4) of this amendment specify the strength which a cargo bin and its attachments must meet for approval. It was intended, in Amendment 42–35, that this strength be such that in the event the airplane was involved in a survivable crash involving high deceleration forces, the cargo bin would not shift forward or be dislodged and injure the passengers. To provide this safeguard, the strength of the bin and its attachments must be able to withstand at least the load factors and emergency landing conditions applicable to the passenger seats installed on the airplane. The combined weight of the cargo bin and its contents must be used to determine this strength. However, in view of the comments received, it appears that the wording of paragraphs (a)(1) and (a)(4) of Amendment 42–35 did not make this strength requirement completely clear. Accordingly, this amendment rewords these paragraphs to specify more clearly the strength requirements which a cargo bin and its attachments must meet for approval.

In addition to the aforementioned changes, other editorial changes were made in this amendment for the purpose of clarification.

Since this amendment relaxes the height requirement of a previous rule which becomes effective January 20, 1962, and imposes no additional burden on any person, I find that notice and public procedure hereon are impractical and unnecessary, and good cause exists for making this amendment effective on less than 30 day's notice.

Amendment rescinded Amendment 42–35 and added new section 42.66.

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