

Part II

Monday August 2, 1982

Department of Transportation

Federal Aviation Administration

**Operations Review Program; Amendment No. 11** 

121-179

## DEPARTMENT OF TRANSPORTATION

#### Federal Aviation Administration

## 14 CFR Parts 121 and 145

[Docket No. 21269; Amdt. Nos. 121-179 and 145-19; Amdt. No. 11]

#### **Operations Review Program**

AGENCY: Federal Aviation Administration (FAA), DOT. ACTION: Final rule.

SUMMARY: These amendments to Parts 121 and 145 relieve, clarify, or simplify requirements applicable to the certification and operation of domestic, flag, and supplemental air carriers and commercial operators of large aircraft and to repair stations. They are part of the Operations Review Program and are based on a compilation of proposals discussed at the Operations Review Conference. These amendments permit a fuel jettisoning allowance when determining landing weight for an alternate airport for departure; require consideration of all passenger cabin occupants when carrying cargo and simplify requirements concerning the carriage of such cargo; make the qualifications required of an en route rest period relief pilot commensurate with that phase of flight; clarify that certain emergency drills can be accomplished on approved training devices; and set new standards regarding recent experience requirements for pilots. These amendments further require that public address systems be audible in lower lobe galleys, and that the pilot in command ensure that all mechanical irregularities that occur during flight time are entered in the aircraft's maintenance log at the end of that flight time. They clarify requirements concerning persons to be certificated as repairmen, provide uniform standards to which test inspection equipment must be calibrated, and eliminate requirements concerning fabrication of alloy members and components by repair stations.

## EFFECTIVE DATE: October 1, 1982. FOR FURTHER INFORMATION CONTACT: Fred Laird, Regulatory Review Branch, ASF-410, Safety Regulations Division,

Office of Aviation Safety, Federal Aviation Administration, 800 Independence Ave., SW., Washington, D.C.20591; Telephone (202) 755–8714. SUPPLEMENTARY INFORMATION:

#### History

This amendment is issued as part of the Operations Review Program. The following amendments have previously been issued as part of this program:

## Title and Federal Register (FR) Citation

- Amendment No. 1: Clarifying and Editorial Changes (41 FR 47227; October 28, 1976).
- Amendment No. 2: Rotorcraft External-Load Operations (42 FR 24196; May 12, 1977, and 42 FR 32531; June 27, 1977).
- Amendment No. 2A: Special Federal Aviation Regulation No. 36, Development of Major Repair Data (43 FR 3084; January 23, 1978).
- Amendment No. 3: Airspace, Air Traffic, and General Operating Rules (44 FR 15654; March 15, 1979).
- Amendment No. 4: Miscellaneous Amendments (43 FR 22636; May 25, 1978).
- Amendment No. 5: Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft (43 FR 22643, May 25, 1978; 43 FR 28403, June 29, 1978; and 44 FR 25201, April 20, 1979).
- Amendment No. 6: General Operating and Flight Rules and Related Airworthiness Standards and Crewmember Training (43 FR 46230; October 5, 1978).
- Amendment No. 8: Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft; Operation of Scheduled Air Carriers with Helicopters; and Airworthiness Standards for Transport Category Airplanes [45 FR 41586; June 19, 1980]
- Amendment No. 9: Operations Review Program: Amendment No. 9 (45 FR 46736; July 10, 1980)
- Amendment No. 10: Airworthiness, Equipment, and Operating Rules (44 FR 61323; October 25, 1979).

These amendments are based on Notice of Proposed Rulemaking No. 81-1 published in the Federal Register January 19, 1981 (46 FR 5484). Interested persons have been given an opportunity to participate in the making of these amendments and due consideration has been given to all comments presented. A number of changes have been made to the proposed rules based on relevant comments received and upon further consideration by the FAA. Except for these changes, the amendments and the reasons for their adoption are the same as those contained in Notice No. 81-1. Some comments received made recommendations for changes which are beyond the scope of the notice and cannot be considered without further notice and public consideration.

## Discussion of Comments

## Proposals Which Are Adopted

The following discussions are keyed to like-numbered proposals contained in Notice No. 81–1:

Proposal 11-1. An alternate airport for departure, as provided in § 121.617, is an airport to which an airplane may proceed, in the event of an emergency occurring during or shortly after takeoff, instead of returning to a departure airport where the weather conditions are below the landing minimums in the certificate holder's operations specifications for that airport. Fuel jettisoning is allowed in certain circumstances under §§ 121.191 and 121.193 in determining the anticipated weight of an aircraft at the time of arrival at a departure airport. This amendment to § 121.197 permits an allowance to be made for fuel jettisoning in addition to normal consumption of fuel and oil when determining the anticipated landing weight of an aircraft at the alternate airport for departure.

No unfavorable comments were received on this proposal and it is adopted as proposed.

Proposal 11-2. This amendment to § 121.285 provides the same level of safety to flight attendants as is afforded to passengers where the carriage of cargo in passenger compartments is concerned. This is accomplished by changing the word "passengers" in the rule to the words "passengers and passenger compartment occupants." The amendment further simplifies and clarifies requirements concerning how cargo may be carried.

All commenters support the intent to protect flight attendants. However, one commenter suggests that the proposed language of § 121.285 (c) and (d) is confusing, misleading, unnecessarily restrictive, and cannot be supported. The commenter recommends deleting proposed paragraph (d) and provides a suggested rewrite of paragraph (c) to clarify the rule's intent.

In reevaluating Proposal 11-2 in light of the comments, the FAA finds it both confusing and unnecessary to refer to "carry-on baggage" in current and proposed § 121.285. Requirements concerning carry-on baggage are covered separately in § 121.589, which references § 121.285(c) as an acceptable way to restrain carry-on baggage. Furthermore, carry-on baggage is also considered cargo. This being the case, it is unnecessary to make specific reference to "carry-on baggage" in § 121.285. Accordingly, § 121.285 is

OPS Reniew

amended to remove any specific reference to carry-on baggage.

The amendment further changes § 121.285(c) to reflect that cargo can be carried aft of any bulkhead or divider in the passenger compartments when it is restrained to the emergency landing load factors in § 25.561(b)(3) and loaded in a specific manner. With this change in language, proposed § 121.285(d) becomes unnecessary and is deleted. As a consequence, Proposal 11–19 which would have added a reference to § 121.285(d) in § 121.589(a)(2), is no longer necessary and is withdrawn.

Proposal 11-7. The proposal to amend § 121.318(b)(4) would have provided that there be public address (PA) capability in all occupiable compartments of an aircraft, including lower lobe galleys when installed.

A number of commenters support the FAA proposed change to § 121.318(b)[4] stating that having an audible PAsystem in every compartment of the aircraft will be of great assistance to both passengers and flight attendants on board wide-body aircraft in an emergency.

One commenter recommends that the FAA change "in each occupiable compartment" in § 121.318(b)(4) to "each galley," since "occupiable compartment" might be misconstrued to include areas such as avionics compartments or certain cargo compartments. The commenter states that such a change would fulfill the FAA's intent by making the PA system audible in all areas where it needs to be audible. In light of the comments received, the language of the proposal has been changed and § 121.318 is amended to require that the PA system be audible at all passenger seats, lavatories, and flight attendant seats and work stations. This revision will adequately ensure that flight attendants who may be in lower lobe galleys receive information disseminated through the PA system.

No unfavorable comments were received concerning the proposed compliance time, therefore, a 2-year compliance time is adopted as proposed.

Proposal 11-7 also proposed to amend § 121.318(b)(5). That portion of the proposal is discussed later under Proposals Determined to be Burdensome.

Proposal 11-15. This amendment to § 121.417(c) clarifies the intent of the rule by allowing training "for each type aircraft" rather than "on each type aircraft." Section 121.417(c) presently requires that each flight crewmember perform certain emergency drills and operate certain equipment during initial training and once each 24 calendar months during recurrent training "on each type aircraft" in which he or she is to serve. However, as indicated by reference to training devices in 121.417(c)(6)(vii), the intent of this rule is that initial and recurrent training can be accomplished in either an airplane or in a training device approved under the training program requirements of 121.407.

All commenters concur in the proposal and the change to § 121.417 is adopted as proposed.

Proposal 11-16. This amendment to § 121.439 relaxes requirements concerning pilot qualification and recent experience. The change allows a pilot who reestablishes recency of experience in an advanced simulator to forego the present requirement of performing additional landings in the aircraft. The amendment further provides that when a simulator is used to meet recency of experience requirements, each required flight crewmember position must be occupied by a qualified person and the simulator must be operated as if in a normal in-flight environment without benefit of the slew or freeze features.

One commenter objects to four specifics of the amendment to § 121.439: First, the commenter objects, on grounds of flight safety, to the importance of the V1 engine cut as a required maneuver when the airplane must be used for reestablishing recency of experience. The maneuver, it states, is not necessary to ensure requalification proficiency in the context of § 121.439. The commenter states that recurrent training/ proficiency checking requirements in Part 121 are adequate to ensure proficiency of this asymmetric thrust maneuver. The engine cut at V1 is necessary and important. The maneuver is one of the most critical that a pilot can be called upon to make. A slow or incorrect response to a failed engine can result in loss of aircraft and life. Performing an engine cut at V<sub>1</sub> is necessary to assure that a pilot who has gone 90 days or more without demonstrating proficiency is capable of conducting safe operations under Part 121

Second, the commenter objects to the addition in proposed § 121.439(c) of a third landing (and takeoff) when the requirement of § 121.439(b)[2) is satisfied in a visual simulator not approved for the takeoff and landing maneuvers. Adding a third landing, argues this commenter, will only result in a nonproductive waste of check airman time. The FAA has reviewed the proposal in light of this comment and has determined that a satisfactory level of pilot proficiency is attained by retaining the present requirement for

two landings in the airplane. A check airman is able to ensure that a pilot is proficient by observing the pilot perform two landings in the airplane. In light of this fact, and in keeping with the spirit of Executive Order 12291, which states that regulatory action shall not be taken unless the potential benefits outweigh the potential costs to society, the FAA has determined that visual simulator training, followed by two landings in the airplane, is sufficient to ensure satisfactory pilot proficiency. It must be noted that under § 121.439(d) a check airman retains responsibility and authority to require that a pilot perform additional maneuvers in the airplane when the check airman deems it necessary. The NTSB, in its comment, also supports the proposed addition of a third landing because it responds to Safety Board Recommendation No. A-74-104 which recommended that recency of pilot experience requirements be made more stringent. However, the FAA has already responded to the NTSB recommendation in Amendment No. 121-144 (43 FR 22648; May 25, 1978) which established stricter requirements for recency of experience than had existed previously.

Third, the commenter objects to the requirement in § 121.439(d) that each crewmember position must be occupied by an appropriately qualified person when requalification training for one pilot is conducted. The commenter contends that this would necessitate wasteful use of personnel. A check. airman utilizing a modern digital simulator, it is asserted, can satisfactorily operate one of the pilot positions and the flight engineer position. Crew coordination is an integral part of the safe operation of an aircraft. A pilot must coordinate his duties with those of the other required crewmembers, especially during an emergency. For this reason, § 121.439(d) requires that each crewmember position be occupied by an appropriately qualified person when regualification training for one pilot is conducted.

Fourth, the commenter objects that the amendment to § 121.439(d), restricting use of the simulator's "slew or freeze" features, is wasteful of simulator and crewmember time, time which can be used for more productive training purposes. An integral part of regaining currency in the operation of an aircraft is conducting configuration changes and checklist completion. A pilot must regain the feel of the aircraft as flaps and gear are positioned. The pilot must also become reaccustomed to the routine of checklist completion. When, for example, the simulator is accelerated

or "slewed" to a final approach position and then stopped or "frozen," the pilot completes his or her responsibilities in an unrealistic time frame. The pilot is then not challenged to pace checklist and configuration changes as if operating in a normal in-flight environment. As a result, valuable training objectives are not met, and the pilot is prevented from being thoroughly trained to operate the aircraft. Section 121.439 is, therefore, amended to require that the simulator must be operated as if in a normal in-flight environment without use of the repositioning features of the simulator.

Proposal 11-17. This amendment to § 121.543 allows the assigned pilot in command to be relieved for a rest period during the en route cruise portion of a flight by a pilot who is currently qualified as a second in command and is also qualified as pilot in command of the aircraft during the en route cruise phase. In addition, this relief pilot must hold an airline transport pilot certificate and an appropriate type rating, as is currently required.

**Operations Review Program** Amendment No. 5 (43 FR 22643; May 25, 1978) provided procedures which allow an assigned pilot in command to leave that pilot's assigned duty station for a rest period if relieved by a pilot qualified to act as pilot in command who holds an airline transport pilot certificate and appropriate type rating. However, since this amendment became effective, exemptions have been issued which allow the pilot in command to be relieved, under certain conditions, by a pilot who is fully qualified as a second in command and fully qualified as a pilot in command during the en route cruise portion of the flight. (Such an individual is currently qualified to serve as pilot in command except that he has not met the 6-month recurrent flight training required by § 121.433(c)(1)(iii), the operating experience required by § 121.434, the takeoffs and landings required by § 121.439, the line check required by § 121.440, and the 6-month proficiency check or simulator training required by § 121.441(a)(1).) The granting of such exemptions does not adversely affect safety since the airplane is operated at all times during the en route phase by a pilot who is fully qualified for that phase of flight. This amendment to § 121.543 eliminates the need for any further exemptions of this type, thereby reducing the paperwork burden on the public and the FAA, and satisfying the intent of Executive Order 12291. No commenters oppose this amendment and it is adopted as proposed.

Proposal 11-18. This amendment to § 121.563 requires that the pilot in command ensure that all mechanical irregularities occurring during flight time are entered in the maintenance log of the airplane. In revising § 121.563, in **Operations Review Amendment No. 8.** (45 FR 41586; June 19, 1980), the word 'time" was inadvertently omitted from the first sentence of that rule, so that the pilot in command was only required to enter in the aircraft maintenance log mechanical irregularities occurring during flight. Section 1.1 defines "flight time" as the time from the moment the aircraft first moves under its own power for the purpose of flight until the moment it comes to rest at the next point of landing ("block-to-block" time), while "flight" is defined in § 121.703 as being only the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing. Since the FAA in Operations **Review Amendment No. 8 never** intended to change the period over which mechanical irregularities must be reported, this amendment corrects the mistake. Additionally, the phrase "next place of landing" at the end of the first sentence of § 121.563 is changed to "end" of that flight time" so that the pilot in command is required to ensure that all mechanical irregularities are logged at the end of flight time. This change is clarifying in nature and helps achieve consistency with the term "flight time" which appears earlier in the revised sentence.

All comments support this change to. § 121.563, and the amendment is adopted as proposed.

Proposal 11-24. This amendment to § 145.41 clarifies that an applicant for a domestic repair staton certificate and rating, or for an additional rating, must recommend at least one person for certification as a repairman and certify to the Administrator that the person recommended meets the requirements of § 65.101 and that he or she is able to perform and supervise the assigned work. No adverse comments were received in response to this proposal. Accordingly, the amendment to § 145.41 is adopted as proposed.

Proposal 11-25. This amendment to § 145.47 identifies uniform standards to which test and inspection equipment must be calibrated. The amendment further retains an existing provision that such equipment be tested at regular intervals.

Several commenters state the belief that requiring "calibration to a standarad of the National Bureau of Standards" means that only a Bureau standard can be used. Such is not the case. It has been longstanding FAA policy that only a standard derived from the National Bureau of Standards is required and such is the intent of this rule change. To clarify this intent, the phrase "derived from" is substituted for the word "of" in the second sentence of proposed § 145.47(b) so that inspection and test equipment must be calibrated "to a standard derived from the National Bureau of Standards."

One commenter objects to the proposal stating it would not allow repair stations or air carriers to contract the calibration of inspection and test equipment and, therefore, compliance would be impractical. Contracting the calibration of precision test and inspection equipment is a longstanding industry practice and is normally approved by the FAA in repair station and air carrier manuals. The prohibition of such contracting is not intended. Therefore, the rule language is clarified to reflect that the repair station need only ensure the testing of such equipment.

Another commenter states that requiring calibration at "regular intervals" is too vague. A specific interval for calibration is approved by the FAA in the repair station or air carrier manual. To require that equipment be tested "at regular intervals" provides the flexibility needed to make the calibration period appropriate to both the equipment involved and the air carrier or repair station's needs. Furthermore, the term "at regular intervals" is currently contained in § 145.47 and has not presented an interpretation problem.

One commenter objects to the proposal on the grounds that if a U.S. domestic repair station were using foreign equipment, it appears that the standard of the foreign country must be used. The FAA, however, intends that a U.S. domestic repair station using foreign equipment could use a standard derived from the National Bureau of Standards or the standard of the country of manufacture if such a standard is approved by the Administrator. The amendment, as adopted, reflects this intent.

Proposal 11-26. This amendment to Appendix A of Part 145 eliminates the current requirement in paragraph (a)(3) that repair stations must be able to fabricate alloy members and components. This amendment also relaxes certain requirements of paragraphs (b)(1)(i) and (iii) by providing that repair stations need not have the equipment and material on the premises for performing the job functions of replacing valve guides and seats, precision drilling, tapping, boring, milling, and cutting if they contract that particular type of work to an outside agency having such equipment and material. No adverse comments were received in response to the proposal. Accordingly, this change to Appendix A of Part 145 is adopted as proposed.

## Proposals Determined To Be Burdensome

On February 17, 1981, the President issued Executive Order 12291 on "Federal Regulations" (46 FR 13193; February 19, 1981). Section 2 of the Executive Order specifies five general requirements for rulemaking conducted by the Federal Government, requirements which will guide FAA rulemaking activity over the coming years. Executive Order 12291 states that regulatory action: (1) Must be based on adequate information on the need for and consequence of proposed government action, (2) shall not be undertaken unless the potential benefits to society for the regulation outweigh the potential cost to society, (3) must have objectives that maximize these benefits, (4) shall consider all alternative approaches, and (5) shall consider regulatory priorities, taking into account the condition of the particular industries affected by regulations and the condition of the national economy. What follows is a discussion of proposals for which the anticipated costs to society for the regulation outweigh the anticipated benefits and which are, therefore, removed from consideration. Removing these proposals from consideration is not inconsistent with the Federal Aviation Act of 1958, as amended.

Proposals 11–5, 11–8, 11–9, and 11–21. These proposals to amend §§ 121.305, 121.323, 121.325, and 135.149, would have~ required the use of an altimeter that meets the performance and environmental standards of the applicable technical standard order or the equivalent for airplanes operating under Parts 121 and 135. All commenters oppose this change in the use of threepointer altimeters. These commenters object that evidence relied upon by the FAA to support the change is outdated and does not take into account the improvements which enhance altitude awareness, such as ground proximity warning systems, altitude alert systems, transponders, altitude reporting capability, and radio altimeters with an alert feature. One commenter estimates the total cost to replace the three-pointer altimeters in its aircraft to be \$11 million. Another commenter states that FAA cost estimates are not accurate and do not appear to include the cost of

standby altimeters as well as spares and test equipment. One commenter states that if the proposal were adopted, 534 air carrier aircraft would be affected at an estimated cost of \$30 million. This commenter points out that there is a relatively small number of altimeter manufacturers and that if all threepointer altimeters were required to be replaced in less than a 3-year period, the demand upon these manufacturers would be overwhelming.

The FAA has received the comments on proposals 11-5, 11-8, 11-9, and 11-21. That review has revealed that the problem of misreading altimeters is not limited to three-pointer altimeters and that replacement altimeters may pose a similar problem. Therefore, the FAAfinds that the proposed rule change would not eliminate the problem. Additionally, the potential benefits to society which would result from adopting these proposed amendments do not outweigh the potential costs to society. Accordingly, the proposals to amend §§ 121.305, 121.323, 121.325, and 135.149 are removed from consideration to permit further research in defining the proper action to alleviate misreading altimeters.

Proposal 11-6. This proposal to amend § 121.309 would have increased the number of portable battery-powered megaphones required on passengercarrying airplanes with a seating capacity of more than 199 passengers from two to three. The present rule requires one megaphone for airplanes with a seating capacity of 60-99 passengers and two for airplanes with a seating capacity of more than 99 passengers. A third, mid-fuselage megaphone was proposed for airplanes with a seating capacity of more than 199 passengers so that emergency information transmitted by megaphone might be more audible to passengers seated in the middle of the fuselage. This proposal would further have revised § 121.309(f) (1) and (2) to require megaphones to be readily accessible from required flight attendant seats.

Several commenters support the FAA's proposed revision of § 121.309 stating that the third megaphone would prove very advantageous in an emergency situation. Several such commenters emphasize their support for the proposed revised wording of § 121.309(f) (1) and (2) for the reasons cited in Notice 81-1.

One commenter opposes adoption of the proposal, stating that in an emergency the flight attendant's hands are otherwise occupied with opening exits and directing passengers to and through these exits. The commenter

further states that it is not necessary that megaphones be accessible to seated flight attendants since the megaphones are not used until after the evacuation, and that the clear and unaugmented voice command has proven very effective in emergency evacuation situations. The commenter believes that it is reasonable to have one or two megaphones on board the aircraft which can be retrieved for use on the ground, if time permits and no fire exists, and that the location and storage of megaphones should be dictated by their normal use. Storage, states the commenter, should be near the fore and aft exits, and if only one megaphone is aboard, it should be located in the forward part of the cabin so that the cockpit crew may have access to it. Finally, the commenter states that if the rule is adopted as proposed, a decrease in safety could result since it would be difficult to develop a safe installation for a bulky item such as a megaphone at flight attendant seats-particularly at the forward bulkhead. The commenter further states that theft of the units will become a problem if they are stowed in an obvious location.

Upon further review, the FAA has determined that to require an additional megaphone or to require that megaphones be readily accessible from required flight attendant seats, would not provide a higher level of safety in operations under Part 121. The safety benefits to be gained by such requirements would not outweigh the potential cost to society. Accordingly, the proposal to amend § 121.309 is removed from consideration.

Proposal 11–7. Proposed § 121.318(b)(5) would have required power to be supplied to the PA system from a power source independent of the main electrical generating system.

A number of commenters support adoption of § 121.318(b)(5) because they believe that the capability to use the PAsystem during emergencies, when the main aircraft power may be interrupted, is vital for initiating and directing emergency evacuations, and for providing preimpact instructions to passengers. One commenter points out that situations have occurred where flight attendants have had to use megaphones to prepare passengers for evacuations because the PA system was not functioning.

One commenter opposes adoption of proposed § 121.318(b)(5), labeling the proposal as being vague and ambiguous. This commenter argues that the regulation would require the PA system to be capable of operation from a power source independent of the main electrical generating system without jeopardizing the in-flight emergency electrical power system, but that neither "main electrical generating system" nor "in-flight emergency electrical power system" are defined. The commenter further objects that the proposal could result in a substantial economic burden. Its estimate exceeds \$100,000 to install a separate battery for the PA systems in its fleet of airplanes.

The FAA has reviewed the proposed requirement that PA systems be capable of operation from a power source independent of the main electrical generating system and has determined that the cost of compliance with such a rule would outweigh any identifiable safety benefits. In light of the comments and in keeping with Executive Order 12291, the proposal to amend § 121.318(b)(5) is removed from consideration. However, implementing this proposal for new aircraft designs will be considered in the future.

Proposal 11-11. This proposal would have amended § 121.333(f) to require that demonstration oxygen masks be identical in appearance to those used aboard the airplane. It would also have provided specific requirements regarding the demonstration of proper donning of such masks. The proposal further would have replaced the phrase "cabin attendant" with the phrase "flight attendant" in § 121.333(d) and [e](3].

A number of commenters concur in the suggested revision to § 121.333. These commenters contend that current announcements on the use of oxygen do not always include complete information, and demonstration equipment is not always similar to actual systems installed on the aircraft. The commenters state that this situation can contribute to confusion and misuse of equipment during a decompression, when immediate and proper lifesustaining equipment use is vital. In this connection, the NTSB emphasizes that to prevent confusion among passengers, it is particularly important that the demonstration masks be identical in external appearance to those used aboard the airplane.

One commenter objects to the requirement that demonstration masks be identical to those used aboard the aircraft. This commenter asserts that mock demonstration masks, costing onethird the price of standard masks, are sufficient in that they are designed to look realistic, can be sanitized very easily, and do not require periodic overhaul/testing as do standard operational masks.

The FAA is unaware of any reports of passenger injuries which have occurred

as a result of improper briefing on the use of oxygen equipment or because the demonstration masks were not identical to those used aboard the airplane. Additionally, the FAA has determined that the economic burden to be imposed on society by requiring that demonstration masks be identical to those used aboard the airplane outweighs any additional safety benefit to be gained by adoption of this requirement. Also, the phrase "cabin attendant" in § 121.333 (d) and (e)(3 clearly conveys who is encompassed by the rule and there is no need to change the wording. Furthermore, current requirements provide for adequate instruction of passengers on the proper donning of oxygen masks. Therefore, in light of the comments received and guidelines of Executive Order 12291, the proposal to amend § 121.333 is removed from consideration.

Proposals 11–20 and 11–22. These proposals would have amended §§ 121.703 and 135.415 to require each certificate holder to report the occurrence or detection of each failure, malfunction, or defect concerning:

(1) Doors and exits designated as emergency exits, including automatic or manual operating systems and components;

(2) Emergency escape slides and components and systems or hardware for manual or automatic deployment; and

(3) Galley or passenger service equipment and crewmember or passenger accommodations which could result in injury to a crewmember or passenger, restrict the emergency egress of either, or adversely affect the airworthiness of the aircraft.

Several commenters support the FAA's proposed changes to §§ 121.703 and 135.415, stating that accurate reporting of problems in the cabin environment will help ensure the safety of passengers and crewmembers. One commenter states that numerous instances of inoperative or malfunctioning equipment not previously required to be reported and repaired have resulted in aircraft continuing to operate in a condition adverse to the safety of its occupants.

One commenter objects to the proposal on the grounds that the maintenance reliability reports currently required by § 121.703 are more than adequate in assuring maintenance of the airplane.

The FAA has reconsidered the proposal in light of the comments and has determined that the maintenance reliability reports currently required are adequate in assuring maintenance of the airplane and that additional reporting requirements would place an economic burden on society without yielding a corresponding increase in benefits, thereby violating the intent of Executive Order 12291. Accordingly, the proposals to amend §§ 121.703 and 135.415 are removed from consideration.

Proposal 11–23. This proposal would have amended § 145.11 to require that an application for a repair station certificate and rating, or for an additional rating, be submitted with duplicate copies of a list by type, make, or model, as appropriate, of the airframe, aircraft engine, propeller, appliance, or part thereof, for which the applicant seeks approval.

One comment was received in response to the proposal. It states that including the term "appliance" would cause an extraordinary amount of work on the part of the repair station.

Upon reconsideration, the FAA has determined that the information sought by this proposal is, in practice, already part of applications for repair station certificates and ratings. Under the current rule, the Administrator may prescribe that such information be provided and the applicant is often required to do so. Therefore, it is not necessary to amend § 145.11 to specifically require the additional information and the proposal is removed from consideration.

Proposal 11-27. This proposal would have amended § 147.35 to require that each transcript issued to a student who graduates from an aviation maintenance technician school or who leaves before graduation contain the hours spent in each subject of instruction, All commenters oppose this change chiefly on the grounds that a costly and burdensome change in a school's computer system would be necessary to change the format of a school's transcript to comply with the proposal.

Upon reconsideration the FAA has determined that the proposal would not be beneficial since it would only be of use to a small number of students desiring to transfer partial credit for uncompleted courses to another school. Accordingly, the proposal to amend § 147.35 is removed from consideration.

#### Proposals Handled By Separate Rulemaking

Proposal 11–3 would amend § 121.291 to allow a Part 121 certificate holder to use the results of a successful full-scale emergency evacuation demonstration conducted by a manufacturer under Part 25, or by another Part 121 certificate holder, rather than conduct its own fullscale emergency evacuation demonstration provided certain additional conditions are met. The proposal would also clarify requirements concerning successful demonstration of ditching procedures for those certificate holders who are operating a type and model of aircraft for which successful ditching procedures previously have been conducted by other certificate holders. Additionally, the proposal would provide for the inflation of one life raft to provide a sufficient test of safety procedures.

Proposal 11–14 would amend § 121.391 to allow an aircraft operator to reduce the passenger-carrying capacity of its aircraft in specified situations by blocking passenger seats, thereby reducing the number of flight attendants required to be aboard the aircraft.

The FAA processed Proposal 11-3 (46 FR 61450; December 17, 1981) and Proposal 11-14 (46 FR 61489; December 17, 1981) separately from the others contained in Notice No. 81-1 due to the public interest they generated.

Proposal 11–13 concerning erasure of cockpit voice recorder information, was substantially modified in light of comments received, thus placing it beyond the scope of the original notice. This modified proposal will be published for public comment in a future rulemaking action.

#### Other Proposals Withdrawn

Proposal 11-4. This proposal would have revised the applicability statement of § 121.301 to prescribe instrument and equipment requirements for operators and persons on board the airplane, as well as for certificate holders.

One comment was received and it was in support of the proposal. However upon further review the FAA has determined that the wording of current § 121.301 is correct especially when this subpart is considered in the larger context of Part 121. The rules contained in the other subparts of Part 121 do not apply to operators and persons on board the airplane. Therefore, it is inappropriate and inconsistent to place requirements for instruments and equipment on such persons.

Proposal 11-10. This proposal would have inserted commas before and after the phrase "and must be provided for other crewmembers" in § 121.329(b)(1) so that the rule would read: "At cabin pressure altitudes above 10,000 feet, up to and including 12,000 feet, oxygen must be provided for and used by each flight crewmember on flight deck duty, and must be provided for other crewmembers for that part of the flight at those altitudes that is of more than 30 minutes duration." The proposal was intended to clarify that the part of the rule which stipulates "for that part of the flight at those altitudes that is of more than 30 minutes duration" applies to the flightcrew on flight deck duty as well as to other crewmembers:

Two comments were received, both of which support the proposal. However, the FAA, upon further study, has determined that current § 121.329 is clear and requires no further change. Accordingly, the proposal to amend § 121.329 is removed from consideration.

Proposal 11-12. This proposal would have amended § 121.351, dealing with extended overwater operations, to clarify the fact that two independent radio communication systems are required by the rule. The clarification would have been accomplished through the following language: "No person may conduct extended overwater operations unless the airplane is equipped with equipment necessary to comply with § 121.349 and an additional and independent radio system that complies with § 121.351(a)(1)."

One comment was received in response to the proposal and it supports the suggested change. However, upon further consideration, the FAA has determined that the proposed clarifying language is unnecessary. The current rule indicates clearly the need for two independent radio systems. Accordingly, the proposal to amend § 121.351 is withdrawn.

Proposal 11-19. This proposal to amend § 121.589(a)(2), which would have added a reference to new paragraph (d) of § 121.285, is unnecessary because § 121.285, as adopted, does not include paragraph (d). Two comments were received in response to the proposal, both of which incorporate by reference the remarks made by the same commenters regarding Proposal 11-2 to amend § 121.285. These remarks and a discussion of the reason for withdrawing paragraph (d) are addressed in the discussion of Proposal 11 - 2.

#### **Regulatory Evaluation**

The following discussion relates to those rule changes which are being adopted:

Proposal 11–1 Fuel Jettisoning. This rule change provides operational flexibility to operators by allowing jettisoning of fuel in calculating anticipated weight at the time of arrival at alternate airports. The rule is permissive and adds no new requirement. Thus, there is no cost. The rule allows dispatching flexibility and is beneficial.

Proposal 11–2—Definition of Passenger Cabin Occupants. This rule change is a no-cost simplification of an existing rule.

Proposal 11-7—Public Address System. This rule change requires that transmission from the PA system be audible at all passenger seats. lavatories, and flight attendant seats and work stations. There should be no additional cost associated with the rule change given the comment by a major industry association that most airplanes operated under Part 121 already comply. The proposal to require that the public address system be capable of operation from a power source independent of the main electrical generating system is not adopted.

Proposal 11-15-Crewmember Emergency Training. This rule change is a clarification of an existing rule which allows use of training devices to perform certain emergency drills for initial and recurrent training of crewmembers. The rule has only benefits and presents no costs.

Proposal 11–16—Pilot Qualification: Recent Experience. This rule change basically relieves and clarifies requirements regarding simulator training and recency of experience.

First, this rule applies chiefly when a pilot has not made at least three takeoffs and landings in an aircraft type within the preceding 90 days. The training set forth in this rule is rarely required since it is usually triggered by a lengthy illness on the part of a pilot, a long work stoppage, or return from furlough.

Presently, when a simulator is used to establish recency of experience, there is a requirement that the pilot perform two landings in line operations observed by a check airman. This requirement is eliminated in the amended rule when an advanced simulator is used. Therefore, the rule change is relaxatory. (However, when a visual simulator is used to establish recency of experience, two landings in line operations observed by a check airman are still required).

The rule requires that when a simulator is used to establish recency of experience, there must be an appropriately qualified individual at each crew position. While the current rule is silent on this point, most training operations today include this important element of crew coordination training. Therefore, there should be no additional cost associated with compliance with this rule change.

Proposal 11–17—Flight Crewmember at Controls. This is a relieving rule change which relaxes requirements regarding qualifications of relief pilots used during en route phases of flight. Proposal 11–24—Recommendation of Persons for Certification as Repairmen. This amendment is a clarification of existing regulation and adds no new requirements.

Proposal 11-25—Testing Standards. This amendment clarifies standards to which test and inspection equipment must be calibrated. The clarification eliminates the need for interpreting the rule in this regard and keeps repair stations from setting their own potentially spurious standards.

Proposal 11–26—Repair Station Requirements. This change relieves requirements concerning the equipment and material needed by repair stations.

#### List of Subjects

#### 14 CFR Part 121

Air carriers, Aircraft, Airmen, Aviation safety, Charter flights.

#### 14 CFR Part 145

Aircraft.

## Adoption of the Amendments

Accordingly, Parts 121 and 145 of the Federal Aviation Regulations (14 CFR Parts 121 and 145) are amended as follows, effective October 1, 1982:

#### PART 121—CERTIFICATION AND OPERATIONS: DOMESTIC, FLAG, AND SUPPLEMENTAL AIR CARRIERS AND COMMERCIAL OPERATORS OF LARGE AIRCRAFT

1. By revising \$ 121,197 by adding a sentence at the end to read as follows:

§ 121.197 Transport category airplanes: Turbine engine powered: Landing limitations: Alternate airports.

\*

\* \* In the case of an alternate airport for departure, as provided in § 121.617, allowance may be made for fuel jettisoning in addition to normal consumption of fuel and oil when determining the weight anticipated at the time of arrival.

2. By revising § 121.285 (b) and (c) to read as follows:

# § 121.285 Carriage of cargo in passenger compartments.

(b) Cargo may be carried anywhere in the passenger compartment if it is carried in an approved cargo bin that meets the following requirements:

(c) Cargo may be carried aft of a bulkhead or divider in any passenger compartment provided the cargo is restrained to the load factors in § 25.561(b)(3) and is loaded as follows: [1] \* \* \* (2) It is packaged or covered in a manner to avoid possible injury to passengers and passenger compartment occupants.

3. By revising § 121.318(b)(4) to read as follows:

#### § 121.318 Public address system.

(b) \* \* \* \*

(4) After Oct. 1, 1984, transmission must be audible at all passenger seats, lavatories, and flight attendant seats and work stations.

#### § 121.417 [Amended]

4. By amending \$ 121.417(c) by substituting the word "for" for the word "on" in the first sentence.

5. By revising § 121.439 by adding a sentence at the end of paragraph (a), revising paragraphs (b) and (d), and adding a new (e) to read as follows:

# § 121.439 Pilot qualification: Recent experience.

(a) \* \* \* In addition, any person who fails to make the three required takeoffs and landings within any consecutive 90day period must reestablish recency of experience as provided in paragraph (b) of this section.

(b) In addition to meeting all applicable training and checking requirements of this part, a required pilot flight crewmember who has not met the requirements of paragraph (a) of this section must reestablish recency of experience as follows:

(1) Under the supervision of a check airman, make at least three takeoffs and landings in the type airplane in which that person is to serve or in an advanced simulator or visual simulator. When a visual simulator is used, the requirements of paragraph (c) of this section must be met.

(2) The takeoffs and landings required in paragraph (b)(1) of this section must include—

(i) At least one takeoff with a simulated failure of the most critical powerplant:

(ii) At least one landing from an ILS approach to the lowest ILS minimum authorized for the certificate holder; and

(iii) At least one landing to a full stop.

(d) When using a simulator to accomplish any of the requirements of paragraph (a) or (b) of this section, each required flight crewmember position must be occupied by an appropriately qualified person and the simulator must be operated as if in a normal in-flight environment without use of the repositioning features of the simulator. (e) A check airman who observes the takeoffs and landings prescribed in paragraphs (b)(1) and (c) of this section shall certify that the person being observed is proficient and qualified to perform flight duty in operations under this part and may require any additional maneuvers that are determined necessary to make this certifying statement.

6. By revising § 121.543(b)(3)(i) to read as follows:

## § 121.543 Flight crewmembers at controls.

- \* \*
- (b) \* \*
- (3) \* \* \*

(i) In the case of the assigned pilot in command during the en route cruise portion of the flight, by a pilot who holds an airline transport pilot certificate and an appropriate type rating, is currently qualified as pilot in command or second in command, and is qualified as pilot in command of that aircraft during the en route cruise portion of the flight. A second in command qualified to act as a pilot in command en route need not have completed the following pilot in command requirements: The 6-month recurrent flight training required by § 121.433(c)(1)(iii); the operating experience required by § 121.434; the takeoffs and landings required by § 121.439; the line check required by § 121.440; and the 6-month proficiency check or simulator training required by § 121.441(a)(1); and

\* \* \*

7. By revising the first sentence of § 121.563 to read as follows:

§ 121.563 Reporting mechanical irregularities.

The pilot in command shall ensure that all mechanical irregularities occurring during flight time are entered in the maintenance log of the airplane at the end of that flight time,\* \* \*

## PART 145-REPAIR STATIONS

8. By revising § 145.41 to read as follows:

# § 145.41 Recommendation of persons for certification as repairmen.

(a) When a person applies for a domestic repair station certificate and rating(s) or additional rating(s) that require a repairman, that person must—

(1) Recommend at least one person for certification as a repairman;

(2) Certify to the Administrator that the person recommended meets the requirements of § 65.101 of this chapter; and (3) Certify that the person recommended is able to perform and supervise the assigned work.

(b) Each person recommended per paragraph (a)(1) of this section must be at or above the level of shop foreman or department head or be responsible for supervising the work performed by the repair station. A qualified person so recommended may be certificated as a repairman.

10. By revising the second sentence of § 145.47(b) to read as follows:

§ 145.47 Equipment and materials: Ratings other than limited ratings.

(b) \* \* \* The station shall ensure that all inspection and test equipment is tested at regular intervals to ensure correct calibration to a standard derived from the National Bureau of Standards or to a standard provided by the equipment manufacturer. In the case of foreign equipment, the standard of the country of manufacture may be used if approved by the Administrator.

11. By amending Appendix A of Part 145 by adding an asterisk (\*) after the words "Replacement of valve guides and seats," in paragraph (b)(1)(i); by adding an asterisk (\*) after the words "Precision drilling, tapping, boring, milling and cutting operations," in paragraph (b)(1)(iii); and by revising paragraph (a)(3) to read as follows:

## Appendix A

(3) Alloy skin and structural components: Repair and replace metal skin using power tools and equipment.

Repair and replace alloy members and components such as tubes, channels, cowlings, fittings, attach angles, etc.,

Alignment of components using jigs or fixtures as in the case of joining fuselage sections or other similar operations.

Make up wooden forming blocks or dies, Fluorescent inspection of alloy

components,\*...

Fabricate alloy members and components such as tubes, channels, cowlings, fittings, attach angles, etc.\*

(Secs. 313, 314, and 601 through 610, of the Federal Aviation Act of 1958, as amended [49 U.S.C. 1354, 1355, 1421 through 1430]: sec. 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)))

Note.—This document relieves a substantial segment of the aviation community of a cost burden by simplifying and clarifying certain requirements applicable to the certification and operation of domestic, flag, and supplemental air carriers and commercial operators of large

aircraft and to repair stations. The FAA's evaluation of the amendment indicates that the aggregate benefits exceed the costs primarily by allowing certain emergency drills to be accomplished using approved training devices, permitting a fuel jettisoning allowance when determining landing weight for an alternate airport for departure, and eliminating requirements concerning fabrication of alloy members and components by repair stations. The preamble contains a discussion of the benefit/cost relationship. Therefore, the FAA has determined that this document involves a rulemaking action that (1) is not a "major rule" under Executive Order 12291, and (2) is not a "significant rule" under Department of Transportation **Regulatory Policies and Procedures (44 FR** 11034; February 26, 1979). In addition, for the reasons stated above, it is certified that the amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified under the caption "FOR FURTHER INFORMATION CONTACT."

Issued in Washington, D.C., on July 2, 1982. Michael J. Fenello,

Acting Administrator.

[FR Doc. 82-20737 Filed 7-30-82; 8:45 am] BILLING CODE 4910-13-M

<sup>(</sup>a) \* \* \*

## 14 CFR Parts 121 and 145

[Docket No. 21269; Amdt. Nos. 121-179 and 145-19]

Operations Review Program; Amendment No. 11

Correction

In FR Doc. 82-20737, beginning on page 33384 in the issue of Monday, August 2, 1982, the headings should have read as they appear above. BILLING CODE 1505-01-M

OPS Review

[As published in the Federal Register (47 FR 34980) on August 12, 1982]