

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 121**

[Docket No. 28072; Notice No. 95-2]

RIN 2120-AF29

**Advanced Simulation Plan Revisions**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of Proposed Rulemaking (NPRM).

**SUMMARY:** The FAA proposes to: Revise and clarify certain requirements of the Advanced Simulation Plan for part 121 operators to authorize more training and checking in simulators; clarify the operating experience requirements for certain second-in-command pilots trained and checked in simulators; and eliminate the requirement that the minimum of 1 year of employment as an instructor or check airman be with the operator of the simulator. This action is needed to respond to concerns identified by certain affected certificate holders in petitions for exemption. It is intended to alleviate unnecessary training costs while maintaining an equivalent level of safety.

**DATES:** Comments must be received by March 16, 1995.

**ADDRESSES:** Comments on this proposal may be mailed in triplicate or delivered to: Federal Aviation Administration, Office of Chief Counsel, Attention: Rules Docket (AGC-10), Docket No. 28072, 800 Independence Avenue Washington, DC 20591.

**FOR FURTHER INFORMATION CONTACT:** Gary E. Davis, Project Development Branch, AFS-240, Air Transportation Division, Office of Flight Standards, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, Telephone (202) 267-3747.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Comments relating to the environmental, energy, federalism, or economic impact that might result from adopting the proposals in this notice are also invited. Substantive comments should be accompanied by cost estimates. Comments should identify the regulatory docket or notice number and should be submitted in triplicate to the Rules Docket address specified above. All comments received

on or before the closing date for comments specified will be considered by the Administrator before taking action on this proposed rulemaking. The proposal contained in this notice may be changed in light of comments received. All comments received will be available, both before and after the closing date for comment, in the Rules Docket for examination by interested persons. A report summarizing each substantive public contact with Federal Aviation Administration (FAA) personnel concerned with this rulemaking will be filed in the docket. Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include a pre-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 28072." The postcard will be date stamped and mailed to the commenter.

**Availability of NPRM's**

Any person may obtain a copy of this NPRM by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-430, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the notice number of this NPRM.

Persons interested in being placed on the mailing list for future NPRM's should request from the above office a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

**Background**

*Terminology*

Appendix H to 14 CFR part 121, "Advanced Simulation Plan," provides guidelines and a means for achieving flightcrew training and checking in advanced airplane simulators. The three-phase plan provides standards for a progressive upgrade of airplane simulators so that the total scope of flightcrew training can be enhanced.

Appendix H specifically describes the simulator and visual system requirements that must be met to obtain approval to conduct certain training and checking in the particular type of simulator (Phase I, II, or III). The term "phase" was used because it was expected that operators would be upgrading their simulator inventories in phases while exercising simulator privileges commensurate with the phase of the simulator. The upgrading of simulators in phases is now essentially

complete and the designation of "phase" for identification of simulator complexity is no longer descriptive. Operators no longer begin at a lower level of qualification and upgrade in phases. The tendency is to acquire a given level simulator that best meets their needs. The agency and the industry now commonly refer to the simulators in terms of "levels." The levels currently used to describe a particular simulator compared with the older phase designations are:

New terminology	Old terminology
Level A .....	Visual.
Level B .....	Phase I.
Level C .....	Phase II.
Level D .....	Phase III.

It is proposed to revise Appendix H to replace the old terminology with the new throughout the appendix. The new terminology will be used throughout this preamble in discussing other amendments proposed herein.

*Advanced Simulation*

Appendix H was developed and adopted when there were no "advanced simulators." Currently, however, advanced simulators exist which have permitted virtual duplication of many aircraft performance characteristics and systems. As a result, the vast majority of U.S. airline pilot training is now conducted in these advanced simulators. According to industry members, however, certain limitations originally incorporated into Appendix H still require a small, yet relatively expensive, amount of training to be completed in the actual airplane.

In light of their highly satisfactory experience with these simulators, some industry members believe that a Level C simulator should be approved for those flightcrew training and checking maneuvers that currently are permitted only in the aircraft or in Level D simulators. In a petition for exemption dated October 12, 1992, the Air Transport Association, on behalf of its affected member airlines and other similarly situated airlines, petitioned for an exemption to provide for initial training in a Level C simulator. Trans World Airlines and Tower Airlines petitioned individually to use a Level C simulator to conduct limited initial and upgrade training and checking functions that would normally be conducted in a Level D simulator. Agreeing in part with the petitioners' supportive information and, based on its own experience, the FAA granted some limited relief for training and checking.

More recently, United Airlines (UAL) has requested similar but slightly more