

**ORDER**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

8000.48B

1/23/92

SUBJ: NATIONAL SIMULATOR PROGRAM

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1. PURPOSE. This order describes the National Simulator Program (NSP) and identifies responsibilities, authorities, and procedures related thereto.
2. DISTRIBUTION. This order is distributed to the director level in the Washington headquarters and the centers; to all Regional Administrators; to branch level in the Flight Standards Service and the Office of Aviation System Standards; to the Flight Standards Division in the Europe, Africa, and Middle East Office; to branch level in the regional Flight Standards Divisions and to the Flight Standards Branch at the FAA Academy; and to all Flight Standards field offices and Flight Inspection field offices.
3. CANCELLATION. Order 8000.48A, National Simulator Evaluation Program, dated January 20, 1983, is cancelled.
4. BACKGROUND. In order to evaluate simulators for use in approved training programs, the National Simulator Evaluation Program (NSP) was established by the Federal Aviation Administration (FAA) in June 1980. Responsibility for the program was originally assigned to the Flight Standards Service (formerly the Office of Flight Operations), and subsequently was shared with the Southern Region. Although FAA has encouraged the expanded use of simulation in pilot training and checking, there remains a need for still broader application of the available technology within the aviation community. In addition, flight training devices (FTD's) that complement simulator use have been identified and authorizations have been developed for their use. These devices are less complex than simulators, and provide limited pilot training and checking capability. The technical quality of simulators and FTD's, and the substantial amount of training and checking which may be authorized in FTD's, require development and maintenance of consistent criteria and systematic evaluation by the NSP Staff.

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Distribution: A-WXYZ-1; A-W(FS/VN)-3; AEU-200 (2 cys);  
A-X(FS)-3; AAC-950 (20 cys); A-FFS-0 (MAX)

Initiated By: AFS-200

5. EXPLANATION OF CHANGES. This order is revised to accomplish the following:

a. The National Simulator Evaluation Program is retitled as the National Simulator Program. The National Simulator Evaluation Team is disbanded.

b. This order transfers total responsibility for the NSP from the Southern Region to the Flight Standards Service. The Air Transportation Division, AFS-200, shall oversee the NSP. The NSP routing symbol is AFS-205. The Southern Region Flight Standards Division, ASO-200, shall domicile and support the NSP.

c. The NSP is expanded to include FTD's and the subsequent standards for qualification and use of FTD's.

d. The NSP Staff will participate in Flight Standardization Board (FSB) and Flight Operations Evaluation Board (FOEB) activities as appropriate.

6. TRAINING. The objective of the NSP, to assure that simulators are properly programmed and replicate the respective airplane, requires comparison of simulators to airplanes, not to other simulators. Consequently, NSP inspectors must, of necessity, acquire periodic training in the appropriate airplane. Further, NSP inspectors must qualify simulators in which all other Flight Standards inspectors and industry pilots receive their training and certification. To accomplish this, all NSP aviation safety inspector personnel will be type rated in two designated aircraft. Each inspector (and/or engineer) will receive one period of recurrent training per year on each of the two aircraft. The training must include at least 2 hours at the controls of the airplane during each recurrent training session. NSP aerospace engineers and other NSP staff will be provided annual training appropriate to their specialty.

7. RESPONSIBILITIES.

a. The Flight Standards Service is responsible for the NSP and all related regulations, standards, and guidance material. NSP staffing levels will be determined by the Director.

b. The Air Transportation Division, AFS-200, is responsible for the overall management of the NSP and maintains line authority over the NSP Manager.

c. The Southern Region Flight Standards Division, ASO-200, is responsible for:

(1) Providing furnishings and facilities for the program staff which is located in the regional headquarters.

(2) Programming training, scheduling training quotas, funding the training travel and per diem, and ensuring all NSP staff are scheduled and trained as appropriate.

(3) Allocating and administering NSP funding for supplies, services, aircraft and simulator rental, overtime, and other recognized categories.

(4) Administering fenced funds allocated by AFS-200 for travel and per diem expenses in support of the NSP in the performance of assigned functions.

d. The regional Flight Standards Divisions will provide office space, furnishings, telephone, and limited administrative services to the NSP representatives domiciled in their region.

8. NSP ORGANIZATION AND FUNCTIONS. The NSP Staff develops criteria and standards for qualification and the conduct of evaluations for aircraft simulators and FTD's; conducts initial and recurrent evaluations of aircraft simulators and the more complex levels of FTD's; and designates simulator evaluation specialists to serve as operations members and active participants on FSB and FOEB. Appendix 1 provides functional statements for the NSP Staff. Any alterations to the organizational structure of the NSP will be at the discretion of the NSP Manager with concurrence of the Manager, AFS-200, and the approval of the Director, AFS-1.

9. FSB AND FOEB INVOLVEMENT. Because of the industry need for flightcrews to be trained and qualified to safely operate new or derivative aircraft at the time of delivery, it is essential that the design, assembly, qualification, and approval of simulators and flight training devices be

accomplished early in the life of an aircraft, preferably before the aircraft enters service. To understand new aircraft and new aircraft systems, to develop evaluation standards, and to conduct appropriate evaluations, the NSP must be integrally involved with these new aircraft as early in the development process as possible. The Air Transportation Division, AFS-200, will ensure NSP membership on the FSB and FOEB for each aircraft type and derivative model, as appropriate.

10. DIRECTIVE FEEDBACK. All AFS employees are encouraged to identify the need for policy and procedural guidance that will ensure efficient work accomplishment. If you have noted a deficiency, clarification, or improvement that may be needed in this directive, please use the attached FAA Form 1320-19, Directive Feedback Information, to submit your comments to the Administrative Management Branch, AFS-13. If an interpretation is urgently needed, you may call the originating office for guidance, but you should followup with submission of the FAA Form 1320-19.



William J. White  
Acting Director, Flight Standards Service

**APPENDIX 1. FUNCTIONAL STATEMENT  
AND ORGANIZATIONAL ALIGNMENT:  
NATIONAL SIMULATOR PROGRAM**

ORGANIZATION. The National Simulator Program Staff, AFS-205, is an organizational element of the Flight Standards Service, and is managed by the Manager, Air Transportation Division, AFS-200. The Program is domiciled in the Southern Region Flight Standards Division, ASO-200, and NSP representatives will be established in other regional Flight Standards Divisions, as required.

FUNCTIONS. AFS-205 is the agency focal point for all matters pertaining to the development and use of flight simulators and other flight training devices in FAA-approved flight training programs. In this regard, the Staff:

a. Plans, directs, controls, and evaluates the national simulator program.

b. Develops and recommends national policy, standards, systems, procedures and program plans relating to aircraft simulators and flight training devices (FTD's).

c. Ensures that simulators are properly programmed and replicate the respective airplane.

d. Conducts initial and recurrent evaluations of aircraft simulators and the more complex FTD's used in FAA-approved flight training programs.

e. Participates in Flight Standardization Board (FSB) and Flight Operations Evaluation Board (FOEB) meetings as appropriate.

f. Keeps AFS-200, AFS-1, ASO-200, and the Regional Administrator, ASO-1, informed regarding all activities of the NSP.

NSP MANAGER AND THE NSP STAFF. The NSP Manager and Staff will:

a. Coordinate program activities.

b. Schedule all initial and recurrent simulator and FTD evaluations.

c. Review all approval test guides associated with aircraft simulators and the more complex levels of FTD's for acceptance and take appropriate action.

d. Conduct the initial and recurrent evaluations of all aircraft simulators and certain FTD's used in FAA-approved flight training programs.

e. Initiate and/or respond to all correspondence relating to simulator or FTD standards for evaluation and qualification.

f. Provide assistance in the exercise of the authority and responsibility of the NSP, including development and, as appropriate, implementation of special studies, programs, or projects.

g. Provide regular participation in aircraft simulator and FTD evaluations by qualified members.

h. Serve as operations members and active participants on FSB's and FOEB's.

i. Accomplish operations inspector work functions when requested and when available as determined by the NSP Manager.

j. Recommend budgetary requests and modifications for NSP functions.

k. Process all NSP travel vouchers in accordance with local procedures.

l. Recommend and initiate rulemaking projects related to simulators and FTD's.

m. Maintain open communication with ASO-200, ASO-1, AFS-200, and AFS-1 regarding program status and unusual situations.