ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

9550.8

10/27/93

SUBJ: **HUMAN FACTORS POLICY**

1. **PURPOSE.** This order establishes policy and responsibility for incorporating and coordinating human factors considerations in Federal Aviation Administration (FAA) programs and activities to enhance aviation safety, efficiency, and productivity. This order also prescribes the composition and function of the Human Factors Coordinating Committee (HFCC).

2. **DISTRIBUTION.** This order is distributed to the division level in Washington, regions, and centers with a limited distribution to all field offices and facilities.

3. **CANCELLATIONS.** Order 1000.31, Managing Human Considerations in Aviation, dated March 3, 1979, and Order 1110.112, Human Factors Coordinating Committee, dated September 7, 1989, are canceled.

4. **BACKGROUND.**

a. The human factor has been widely recognized as critical to aviation safety and effectiveness. In the report entitled "Safe Skies for Tomorrow," the Office of Technology Assessment (OTA) concluded that long-term improvements in aviation safety will come primarily from human factors solutions. Further, such solutions will be established through consistent, long-term support for human factors research and development, analysis, and the application of human factors information. Subsequent to the OTA report, Congress enacted the Aviation Safety Research Act of 1988 (PL 100-591) calling for the FAA to augment its research effort in human factors and ensure coordination with other agencies performing such research. These assessments and directions resulted in the FAA's emphasizing new and coordinated efforts in the area of human factors with National Aeronautics and Space Administration, Department of Defense, and a multitude of professional groups such as the Human Factors and Ergonomic Society and the Air Transport Association Human Factors Task Force, whose members include pilot and contractor unions, airframe and parts manufacturers, as well as major airlines. One product of such efforts includes the National Plan for Aviation Human Factors.

b. This plan, together with the agency's recognition of the importance of human factors, calls for a systems approach to human factors and the need to institutionalize the application of human factors principles within FAA. This systems approach will:

(1) Conduct human factors research on existing systems and operations to define problems and identify cost-sensitive solutions to achieve performance enhancements;

(2) Acquire the necessary human performance information in the research, development, and engineering process; and

(3) Apply that information to FAA Capital Investment Program system acquisitions and to FAA regulatory activities in the promotion of civil aviation.

c. The benefits of this approach are increased personnel efficiency and effectiveness, improved system performance, reduced operations and maintenance costs, increased availability of objective data for use in FAA regulatory activities, and enhanced aviation safety.

5. **EXPLANATION OF CHANGES.** This order clarifies the meaning of human factors considerations, provides the background for the human factors approach, gives additional details for conducting human factors activities, and broadens the representation of the HFCC.

6. **DEFINITIONS.**

a. Human Factors. Within the FAA, human factors entails a multidisciplinary effort to generate and compile information about human capabilities and limitations and apply that information to equipment, systems, facilities, procedures, jobs, environments, training, staffing, and personnel management for safe, comfortable, effective human performance.

b. System Acquisitions. System acquisitions encompass functions related to all FAA major and non-major acquisitions including developmental items, nondevelopmental items (NDI), commercial-off-the-shelf (COTS) procurements, research and technical services, product improvements, change proposals, prototypes, and other hardware and software acquisitions.

c. System Operations. System operations encompass all functions related to the operation, maintenance, and regulation of the NAS under the purview of FAA.

7. **HUMAN FACTORS COORDINATING COMMITTEE.** This order prescribes the HFCC as stated in Appendix 1, Human Factors Coordinating Committee. The committee will facilitate the generation and application of human factors information throughout FAA.

8. **POLICY.** Human factors shall be systematically integrated into the planning and execution of the functions of all FAA elements and activities associated with system acquisitions and system operations. FAA endeavors shall emphasize human factors considerations to enhance system performance and capitalize upon the relative strengths of people and machines. These considerations shall be integrated at the earliest phases of FAA projects.

9. **OBJECTIVES.** The human factors-oriented approach is to:

a. Conduct the planning, reviewing, prioritization, coordination, generation, and updating of valid and timely human factors information to support agency needs;

b. Develop and institutionalize formal procedures that systematically incorporate human factors considerations into agency activities; and,

c. Establish and maintain the organizational infrastructure that provides the necessary human factors expertise to agency programs.

10. **RESPONSIBILITIES.** To ensure that human factors are systematically included in FAA endeavors, executive directors and assistant and associate administrators shall, as appropriate within their organizational purview, establish and assign responsibilities to accomplish the policy and objectives cited in paragraphs 8 and 9.

David R. Hinson
Administrator

APPENDIX 1. HUMAN FACTORS COORDINATING COMMITTEE

The Human Factors Coordinating Committee (HFCC) shall continue in force to facilitate FAA human factors endeavors constructively and enhance the use of human factors information. Composition and functions of the HFCC are as follows:

1. Composition. The committee shall be sponsored and chaired by the FAA Chief Scientific and Technical Advisor for Human Factors (Office of the Executive Director for System Development). Executive directors, associate administrators, assistant administrators, and center directors shall each designate one member (or more if necessary) who shall have the authority to represent that organization in human factors matters. A recording secretary shall be appointed by the committee for the purpose of preparing minutes of the meetings. The HFCC shall encourage participation in its activities by others with significant human factors responsibilities.

2. Functions. The HFCC shall function as an intra-FAA committee to coordinate human factors information, matters, and activities among the executive directors, associate administrators, and assistant administrators. Specific functions of the HFCC are to:

a. Enhance the identification of human factors research requirements and the coordination of research results;

b. Foster the dissemination and exchange of human factors information among agency organizations;

c. Facilitate the integration of human factors into rulemaking, systems acquisitions, and other activities within the agency;

d. Identify the need for changes to existing policies, processes, research programs, regulations, or other human factors-related activities and programs; and

e. Monitor the efficacy of human factors efforts and programs within FAA.

3. Administration. The HFCC shall develop internal operating procedures that define the frequency of meetings, the structure and relationship of working groups and subcommittees, and the processes and procedures by which its activities are to be carried out.

4. Responsibilities.

a. The Chairperson. The chairperson shall be responsible for:

(1) Ensuring that the functions of the committee are accomplished;

(2) Establishing agenda, schedules, and locations for meetings;

(3) Reviewing committee documentation prior to publication or distribution; and,

(4) Ensuring appropriate representation, organization, documentation, and administration to support the committee.

b. Committee Members. Committee members shall be responsible for:

(1) Establishing subcommittees, working groups, and other means of coordinating human factors programs, research, or other activities within their organizations.

(2) Providing information, briefings, and documentation to the committee on human factors matters within their organizations.

(3) Attending committee meetings or designating an alternate if attendance is not possible.

(4) Participating in other committee activities such as workshops or seminars when appropriate.