# ORDER

9550.7A

# RESEARCH GRANTS PROGRAM

April 19, 1996

**DEPARTMENT OF TRANSPORTATION**
**FEDERAL AVIATION ADMINISTRATION**

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Initiated By: **AAR-201**

## FOREWORD

This order establishes policies and procedures for the award and administration of aviation research grants.

Through grant awards, the FAA supports advanced research in areas of potential benefit to the long-term growth of civil aviation, in areas related to the prevention of catastrophic failure, and the implementation of technologies and procedures to counteract terrorist acts against civil aviation.

David R. Hinson
Administrator

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# CHAPTER 1. INTRODUCTION

## SECTION 1. GENERAL

1. PURPOSE. This revision establishes uniform policies and procedures for the award and administration of aviation research grants established under the authority of the Federal Aviation Administration (FAA) Research, Engineering, and Development Authorization Act of 1990, Public Law 101-508, and the Aviation Security Improvement Act of 1990, Public Law 101-604. This order implements Office of Management and Budget (OMB) Circular A-110, Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations, and 49 CFR (Code of Federal Regulations) Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local Governments.

2. DISTRIBUTION. This order is distributed to division level in Washington, branch level at the FAA Technical Center, regional administrator level at the regions, and director level at the Aeronautical Center.

3. CANCELLATION. Order 9550.7, Research Grants Program, dated April 8, 1992, is canceled.

4. EXPLANATION OF CHANGES.

a. The role of the Executive Research Committee is eliminated from the overall grants process.

b. Chapter 4, section 3, describes changes for proposal review and evaluation. The policy for grant award amendments is also provided.

c. Chapter 6 describes new payment methods available. Electronic funds transfer is now available through the Automated Clearing House (ACH) Network. The new form for requesting this payment method is provided.

d. Chapter 7 reflects changes in termination, suspension, and enforcement procedures.

e. Chapter 8, section 3, updates the requirements for release of information by the FAA. Grants awarded for $1.5 million or more must be reported to the Office of the Secretary of Transportation, Public Affairs. In section 5, Intangible Property is changed to Intellectual Property and the term is defined. Section 6 describes the policy for publication and distribution of aviation security publications. All research results related to aviation security must be reviewed by the Associate Administrator for Civil Aviation Security, ACS-1, prior to publication or release to the general public (par 860).

f. FAA Forms 9550-1 through 9550-6 have been revised. Standard Form 3881, ACH Vendor/Miscellaneous Payment Enrollment Form is new. DOT Form 4220.41 is also new.

g. The entire order is restructured with new pages and paragraph numbers.

5. BACKGROUND.

a. Public Law 101-508 was enacted to enhance FAA's access to resources and research facilities available at colleges, universities, and other non-profit research institutions. It authorizes FAA to establish research grant programs that encompass a broad spectrum of aviation research activities and Centers of Excellence that are targeted at specific areas of long-term aviation research. These programs encourage and support innovative, advanced research of potential benefit to the FAA mission. As a result, the aviation research talent base will increase and will be available to the FAA and the aviation community.

b. By encouraging academic institutions to establish and nurture aviation research programs, and by expanding the role these institutions play in aviation research, the FAA will nurture the long-term growth of the aviation industry.

c. Public Law 101-604 was enacted in response to the report issued by the President's Commission on Aviation Security and Terrorism. The law authorized the creation of a grants program to accelerate and expand the research, development, and implementation of technologies and procedures to counteract terrorist acts against civil aviation.

6. DEFINITIONS. The basic terms pertaining to Research Grants have the meanings indicated below. The definitions of other terms used in the order are contained in the relevant chapters.

a. A grant is a legal instrument that permits an executive agency of the Federal Government to transfer money, property, services, or anything of value to a grantee to carry out a public purpose of support or stimulation. Limited involvement is anticipated between the agency and the recipient during the performance of the contemplated activity.

b. A cooperative agreement is a legal instrument that permits an executive agency of the Federal Government to transfer money, property, services, or anything of value to a grantee to carry out a public purpose of support or stimulation. It may be used when an assistance project requires substantial FAA involvement during the project performance period. Substantial FAA involvement may be necessary when an activity is technically or managerially complex, or requires extensive or close coordination with other federally supported work, or to help ensure suitability or acceptability of certain aspects of the supported activity. In this order, policies, practices, and procedures that are applicable to grants are taken to be similarly applicable to cooperative agreements unless otherwise noted. The cooperative research and development agreement (CRDA) program authorized under the Technology Transfer Act of 1986 is not part of this program.

c. A college or university is a public or private institution of post secondary education which, if it is a U.S. college or university, is listed in the current edition of the Directory of Post Secondary Institutions, published in two volumes by the Center for Education Statistics, U.S. Department of Education. This document is for sale by the Superintendent of Documents, U.S. Government Printing Office.

d. A non-profit institution is any corporation, trust, association, cooperative, or other organization that is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest; is not organized primarily for profit; and uses its net proceeds to maintain, improve, and/or expand its operations.

e. A principal investigator is the individual at the college, university, or non-profit institution who serves as the main point of contact responsible for all research and reporting activities.

f. A technical monitor is a Federal employee who serves as the central point of contact for the technical aspects of the grant. This person is responsible for interacting with the grantee, monitoring technical aspects of the grant, and reviewing costs submitted for reimbursement.

7. REQUESTS FOR INFORMATION. Inquiries regarding this subject matter should be directed to the Office of Research and Technology Applications at the FAA Technical Center.

8. FORMS. Required forms are available from AAR-201 at the FAA Technical Center.

9. AUTHORITY TO CHANGE THIS ORDER. The Associate Administrator for Research and Acquisitions may issue changes to this order necessary to implement and manage the Research Grants Program. The Administrator reserves the authority to approve changes that establish policy, delegate authority, or assign responsibility.

10.-19. RESERVED.

## SECTION 2. GRANT PROGRAM DESCRIPTIONS

20. GENERAL. Public Laws 101-508 and 101-604 authorize three separate grant programs. Although there are similarities and differences contained in each program, they have been integrated into the Research Grants Program and a unified process as applicable through the solicitation, review, selection, and administration of all research grants. Proposals for education, training, or airport development are not supported under this program. These proposals are under the jurisdiction of the Airway Science Program and the Airport Grants Program resident at FAA headquarters in Washington, DC. Grants under the Airport Improvement Program are also not part of this aviation research grants program. Additionally, FAA does not support technical assistance, pilot plant efforts, research requiring security classification (with the exception of aviation security projects), the development of products for commercial marketing, or market research for a particular product or invention under this program. FAA may enter into cooperative agreements with such governmental entities as considered appropriate by the agency. The following paragraphs describe the characteristics of each program as contained in the statutes.

21. AVIATION RESEARCH GRANT PROGRAM (Public Law 101-508, Section 9205). Grants under this program are to be awarded for the conduct of research for the long-term growth of civil aviation. Research topics may include air traffic control automation, aviation applications of artificial intelligence, aviation training technologies and techniques, human factors in highly automated environments, and aircraft safety.

a. Recipients. Grants may be made to colleges, universities, and non-profit research organizations.

b. Selection Criteria. A solicitation, review, and evaluation process is required that ensures the proposals have adequate merit and relevancy to FAA mission. Consideration must be given to ensure an equitable geographic distribution of grant funds and inclusion of historically black colleges and universities and other minority institutions.

22. CATASTROPHIC FAILURE PREVENTION RESEARCH GRANT PROGRAM (Public Law 101-508, Section 9208). Grants under this program are to be awarded for the conduct of research relating to the development of technologies and methods to assess the risk and prevent defects, failures, and malfunctions of products, parts, processes, and articles manufactured for use in aircraft, aircraft engines, propellers, and appliances that could result in a catastrophic failure of an aircraft.

a. Recipients. Grants may be awarded to colleges, universities, and non-profit research organizations.

b. Selection Criteria. A solicitation, review, and evaluation process is required that ensures proposals have adequate merit and relevance to FAA mission specific research in catastrophic failure prevention.

23. AVIATION SECURITY RESEARCH GRANT PROGRAM (Public Law 101-604, Section 107). Grants under this program are to be awarded for the conduct of research, development, and implementation of technologies and procedures to counteract terrorist acts against civil aviation.

a. Recipients. Grants may be awarded to colleges, universities, non-profit institutions, and other entities possessing demonstrated capability in aviation security.

b. Selection Criteria. A solicitation, review, and evaluation process is required that ensures proposals have adequate merit and relevance to FAA mission specific research in aviation security.

24. AUTHORIZATION OF APPROPRIATIONS. Such sums, as may be necessary for the purpose of carrying out the established grant program, are authorized to be appropriated from the Airport and Airway Trust Fund after completion of the required security threat review, which was imposed by the Aviation Security Improvement Act (ASIA).

25. SCIENTIFIC ADVISORY PANEL, a subcommittee of the Research, Engineering, and Development (R,E&D) Advisory Committee, shall be established for the purpose of reviewing, commenting on, and advising the Administrator on the progress of, or modifications to, the grants established in this program. The R,E&D Advisory Committee is a body of up to 30 individuals, appointed by the Administrator and mandated by the Aviation Safety Research Act of 1988 (Public Law 100-591), who provide advice and recommendations to the Administrator regarding the needs, objectives, plans, approaches, contents, and accomplishments with respect to FAA R,E&D programs.

26.-199. RESERVED.

# CHAPTER 2. PROGRAM RESPONSIBILITIES

## SECTION 1. OVERSIGHT STRUCTURE

200. GENERAL. This section establishes the oversight structure for the Research Grants Program and prescribes the associated functions. Oversight is provided by the chain of command acting on behalf of the agency to ensure that program execution is in compliance with relevant laws, regulations, and policies; to minimize or eliminate the potential for waste, loss, misappropriation, etc.; and to ensure program objectives are effectively carried out. Program officials, and the appropriate individuals in the oversight structure, approve program funding for research grants. The oversight structure approves discretionary funded research grants when discretionary funds are available.

201. REQUIREMENTS.

a. The R,E&D Advisory Committee shall review the research and training carried out by the Centers of Excellence. These reviews are provided to the Administrator.

b. A Scientific Advisory Panel, a subcommittee of the R,E&D Advisory Committee, reviews, comments on, and advises the Administrator on the progress of, and any necessary modifications to, the grant programs established under the Aviation Security Improvement Act of 1990 (Public Law 101-604).

202. RESPONSIBILITIES.

a. The Administrator:

(1) Approves grant requests > $5 million.

(2) Exercises agencywide oversight of research grants policy, procedures, and technical goals.

b. The Associate Administrator for Research and Acquisitions:

(1) Develops congressional reports and briefings related to research grants.

(2) Approves grant requests ≤ $5 million.

(3) Approves technical goals and policy for research grants.

c. The Director, FAA Technical Center:

(1) Approves grant requests ≤ $2.5 million.

(2) Recommends research grant technical goals and policies to the Associate Administrator for Research and Acquisitions.

(3) Approves all requests for discretionary funded grants.

(4) Submits a notice to award discretionary grants to the Associate Administrator for Research and Acquisitions at least 60 days in advance of the projected award date.

d. Service directors (or equivalent):

(1) Approve grant requests $\leq$ $1 million.

(2) Ensure that training requirements for technical monitors and evaluation team members as established by the Grants Officer are met.

e. The Director, Office of Research and Technology Applications:

(1) Manages and administers the Research Grants and Centers of Excellence Programs.

(2) Provides discretionary grants notices and requests to the Director, FAA Technical Center for approval.

(3) Recommends research grants technical goals and policies to the Director, FAA Technical Center.

(4) Produces and distributes, as appropriate, research grants reports including:

(a) The required annual report to Congress.

(b) Quarterly program progress reports.

203.-219. RESERVED.

## SECTION 2. GRANT REQUEST APPROVAL AUTHORITY

220. APPROVAL AUTHORITY. Grant requests (FAA Form 9550-6) must be approved and signed consistent with the dollar thresholds specified. The signature of a grants staff member is required to verify appropriate approvals have been obtained.

a. Division Manager or Equivalent--$1 million and under.

b. Service Director or Equivalent--$1 million and one to $2.5 million.

c. Associate Administrator or Equivalent--$2.5 million and one to $5 million.

d. Administrator--Over $5 million.

e. Grants Officer--Approves requests for discretionary funds, when available.

221. AWARD AUTHORITY. The Grants Officer is authorized to award, administer, modify, and terminate a grant. Such authority shall be exercised subject to, and in accordance with, applicable laws and regulations. The above approvals are required before the award of a grant. The Grants Officer is authorized to award grants to a designated Center of Excellence.

222.-229. RESERVED.

## SECTION 3. PROGRAM RESPONSIBILITIES

230. GENERAL. This section provides responsibilities for the management and administration of the Research Grants Program.

231. OFFICE OF RESEARCH AND TECHNOLOGY, at the FAA Technical Center, is responsible for management and administration of the program for FAA. As such, this office is responsible for advising and keeping the assembled committees and technical program managers informed of all grant program activities. Activities include, but are not limited to, technical emphasis areas for solicitation, compliance with statutes as far as equitable geographic distribution, and consideration of historically black colleges and universities and other minority institutions, program progress reports, etc.

232. THE GRANTS OFFICER, located at the FAA Technical Center:

a. Executes the program and participates directly in all aspects of the grants program.

b. Awards, administers, modifies, and terminates grants as authorized under the enabling statutes and delegated authority.

c. Provides advice to assembled committees and technical program managers.

d. Assists in the preparation and coordination of technical emphasis areas for solicitation.

e. Provides technical advice and guidance to the grantee community, reviews proposals for completeness, coordinates required audits, provides guidance to technical evaluation teams, awards grants, assists technical monitors in grant administration, assists in grant closeout, and provides program status reports.

f. Approves waivers and deviations to research grants policies and procedures consistent with governing laws and regulations.

g. Establishes training requirements for grants staff and individuals serving on evaluation teams or participating as technical monitors.

233. EVALUATION TEAMS consist of Federal employees appointed by the Grants Officer after nomination by the office of primary interest (OPI). The teams shall consist of at least three technical peers for initial proposal submission and at least one for proposal modifications. Outside reviewers may be included for evaluation support with prior approval from the Grants Officer. The team is responsible for reviewing, evaluating, and recommending proposals for research based on stated criteria. Technical evaluators are required to complete training requirements as established by the grants office to maintain their status as technical evaluators.

234. A TECHNICAL MONITOR is a Federal employee appointed by the OPI, with approval from the Grants Officer, for each research grant awarded (i.e., for program funded grants). The name and telephone number of the cognizant technical monitor appears on the grant award. This person serves as the central point of contact for the technical aspects of the grant. This person is responsible for interaction with the grantee, technical monitoring of the grant, and review and approval of costs submitted for reimbursement. The technical monitor is also responsible for informing the grants office of any significant developments relative to the grant award. Technical monitors are required to complete training requirements as established by the Grants Officer to maintain their status as technical monitors.

235. THE FAA TECHNICAL CENTER provides accounting services for matters relevant to research grants.

236. THE OFFICE OF CIVIL RIGHTS, through the Civil Rights Staff, ACT-9, provides direction and monitors all complaints related to race, color, religion, sex, age, national origin, or handicap.

237. THE OFFICE OF THE CHIEF COUNSEL, through the Assistant Chief Counsel, ACT-7, at the FAA Technical Center, provides legal advice for matters related to research grants. Counsel reviews legal aspects of the grants program, including the solicitation, administration, suspension, and termination of grants and cooperative agreements.

238.-299. RESERVED.

# CHAPTER 3. RESERVED.

300-399. RESERVED.

# CHAPTER 4. PROPOSAL SOLICITATION, SUBMISSION, REVIEW AND EVALUATION, AND GRANT AWARD

## SECTION 1. PROPOSAL SOLICITATION

400. MECHANISM FOR GENERATING PROPOSALS. The primary mechanism used by FAA to generate solicited proposals is publication of a Notice of Solicitation in the Federal Register. The notice describes the areas in which FAA wishes to award grants, identifies the effective term of the notice, addresses eligibility and evaluation criteria, and provides proposal submission guidelines. The published solicitation is supplemented with a direct mailing.

401. INTERGOVERNMENTAL REVIEW AND REPORTING REQUIREMENT FOR FEDERAL PROGRAMS. This paragraph implements Executive Order 12372, Intergovernmental Review of Federal Programs.

a. The Office of Research and Technology Applications furnishes information on the Research Grants Program, as required by OMB Circular A-89, Federal Domestic Assistance Program Information, to the Office of Acquisition and Grants Management for annual publication in the Catalog of Federal Domestic Assistance by OMB.

b. The office furnishes information for the FEDIX/MOLIS, an automatic data processing system that provides on-line information on assistance awards, including grants and links the Federal and academic communities to facilitate research, education, and services.

c. The office furnishes information to historically black colleges and universities (HBCU's) and other minority institutions to assist in meeting the spirit and intent of Executive Order 12876.

d. In states that require program review through Executive Order 12372, the office ensures that the project has been reviewed by the State Single Point of Contact as required by 49 CFR, Part 17.

e. The office furnishes information regarding the program solicitation through the INTERNET system.

402.-419. RESERVED.

## SECTION 2. PROPOSAL SUBMISSION

420. DEFINITIONS.

a. The Principal Investigator is the individual designated by the proposing organization and recognized by FAA, who is responsible for the scientific or technical direction of the project.

b. The Authorized Organizational Representative is the administrative official who is empowered to commit the proposing organization to the conduct of a project that FAA is being asked to support.

421. GENERAL.

a. The purpose of a proposal is to provide a statement establishing the objectives and the significance of the proposed activity, the technical qualifications of the principal investigator and his or her organization, and the level of funding required to carry out the stated activity. Discussions between the principal investigator and the FAA sponsor are encouraged prior to proposal submission to clarify and refine these issues.

b. The proposal must contain sufficient information to persuade the FAA's technical staff and members of the technical community that the proposed activity is both sound and worthy of support under FAA criteria for the selection of projects, or other criteria that may be specified. The proposal should be succinct and self-contained.

c. FAA expects strict adherence to the rules of proper scholarship and attribution and abidance with the peer merit review evaluation and selection system on the basis of which FAA makes awards. The responsibility for proper attribution and citation rests with authors of a research proposal, all parts of which should be prepared with equal care. Failure to adhere to such standards will result in disqualification of the proposal.

d. Before submitting the proposal to FAA, the authorized organizational representative should determine that:

(1) The proposed project is consistent with the policies and goals of the submitting organization.

(2) The institution can make available the necessary facilities, general purpose equipment, special purpose equipment, and services for the conduct of the project.

(3) The organization can make available the necessary personnel for the time estimated to be required.

(4) The organization has legal authority to accept grants and the requisite policies, procedures, and personnel to meet the standards shown in chapter 5.

(5) The total costs estimated to be required for the conduct of the project are reasonable and there is a plan for meeting such costs either from grant funds or from other sources.

(6) The costs that FAA is being asked to support are allowable, and the treatment of direct or indirect costs in the proposal budget is consistent with Federal cost principles and with the policies of the submitting organization (allowable costs and governing regulations are discussed in chapter 6).

e. The institutional representative must attach a copy of the latest institutional indirect cost agreement negotiated with the institution's cognizant Federal audit agency (i.e., Department of Health and Human Services, Department of Defense, or other) currently in force. An indirect cost proposal must be submitted separately to the grants office if the submitting organization does not have an indirect cost base and rate recognized by FAA or by the cognizant Federal negotiating agency identified in OMB Circular A-88, Coordinating Indirect Cost Rates, Audit, and Audit Follow-up at Educational Institutions.

f. The proposing organization should submit, upon request by the grants office, the organization and management information described in chapter 5.

422. TYPES OF GRANTS.

a. A standard grant is a type of award under which FAA agrees to support a specified level of effort for a specified period of time.

b. A continuing grant is a type of award under which FAA agrees to support at a specified level of effort for a specified period of time, with a statement of intention to provide certain additional future support of the project, provided funds become available and the achieved results warrant further support.

423. FUNDING METHODS. Eligible proposals are funded with designated program money or with discretionary funding, if available.

424. CATEGORIES OF APPLICANTS AND INFORMATION CONTACTS.

a. General. Scientists and engineers and other members of the technical and academic community usually initiate research proposals that are submitted to FAA on their behalf by their employing organizations. FAA is seeking to elicit proposals from historically black colleges and universities and other minority institutions, and to provide an equitable geographic distribution of awards. Contact with the FAA grants office is recommended prior to submitting formal proposals.

b. Principal Types of Grantees. Proposals for support are received from, and grants may be made to, the following types of organizations:

(1) Colleges and universities to include historically black and other minority institutions.

(2) Non-profit organizations such as independent museums; observatories; research laboratories; hospitals; consortia; professional, scientific, and educational associations or societies; and similar organizations.

(3) Appropriate research institutions and facilities with demonstrated ability to conduct research in the development and implementation of technologies and procedures to counteract terrorist acts against civil aviation.

(4) Governmental entities as the Administrator considers appropriate to conduct research in the development and implementation of technologies and procedures to counteract terrorist acts against civil aviation.

425. WHEN AND WHERE TO SUBMIT GRANT PROPOSALS. Unless otherwise noted in the solicitation, proposals should be submitted to allow at least 6 months between the date of receipt by FAA and the anticipated starting date of the research. Each original proposal, with three copies, shall be forwarded to the address specified in the program solicitation. Mark the envelope "Grant Proposal." FAA assigns each proposal a number and acknowledges receipt of each proposal. The proposal number must be referred to in all future correspondence concerning the proposal.

426. FAA PROPOSAL FORMAT. The proposal should be assembled in the following sequence. These elements must be included to be considered an eligible proposal. Specifics regarding these elements are found in the program solicitation.

a. Cover Letter. A standard business format cover letter. The letter may be signed by either the principal investigator, an approving official at the institution, or both.

b. Cover Sheet. The cover sheet must follow the general format of FAA Form 9550-1, Cover Sheet for Proposals to FAA.

c. Table of Contents.

d. Project Summary. The summary should be a 300 word, self-contained description of the project or activity that would result if the proposal is funded by FAA.

e. Results from Prior FAA Support. If the principal investigator(s) has received FAA funding in the past 5 years, information on prior funding should be provided.

f. Project Description. The main body of the proposal should be a detailed description of the research to be undertaken.

g. Bibliography.

h. Biographical Sketches of senior personnel.

i. Budget. FAA Form 9550-2, Summary Proposal Budget.

j. Current and Pending Support. FAA Form 9550-3 gives a suggested format for reporting current and pending support for proposals.

k. Indirect Cost Agreement.

l. Salary Schedule. A copy of the latest salary schedule for all individuals identified on the budget estimate.

m. Appendices. Must include a certification regarding civil rights and, if required, SF-LLL, Disclosure of Lobbying Activities, and an indirect cost proposal, if required.

427. WITHDRAWAL. A proposal may be withdrawn at any time before an award is made. A written request stating the reason for withdrawal should be signed by the principal investigator and the authorized organization representative and forwarded to the grants office.

428. CONFIDENTIAL ASPECTS OF PROPOSALS AND GRANTS.

a. Release of Grantee Proposal Information.

(1) Proposals for FAA support may be reviewed not only by FAA staff, but also by selected outside reviewers chosen for their knowledge in the subject areas of proposed projects. An integral part of most proposals is a budget that includes the proposed commitment to the project by named senior personnel of a specified amount of time, or effort, for which the proposal requests FAA support and the corresponding salary amounts. Unless the proposing organization itemizes these salary amounts in a separate statement, rather than in the budget itself, this information may be disclosed, if requested, under the Freedom of Information Act (discussed in chapter 8).

(2) Any organization submitting a proposal for support has the option of listing, in a separate schedule, the salary amounts for named senior project personnel that it proposes be reimbursed through an FAA grant. If this option is selected, the proposal budget may substitute asterisks for the salary amounts. In this event, the omitted information is to be furnished in a separate salary schedule with the legend, "It is requested that the following salary information not be released to persons outside the Government." Two copies should be attached to the original proposed budget only. Any separate salary schedule bearing the legend described are considered confidential and withheld from release, to the extent permitted by law. Whether or not the option is exercised, the proposed budget should continue to list the names of senior project personnel and the total senior personnel salaries for which FAA funding is requested.

(3) Proposals resulting in FAA grants become part of the award instrument and will be made available to the public, with the exceptions identified in paragraph 428a(4). Any separate salary schedule bearing the legend described in paragraph 428a(2) are considered confidential and withheld from release to the extent permitted by law. Portions of proposals resulting in awards that contain descriptions of inventions in which either the Federal Government or the grantee owns or may own a right, title, or interest (including a non-exclusive license) are not normally made available to the public until after a reasonable time for the filing of a patent application. The policy is to notify the grantee of requests for funded proposals in order for the grantee to advise the FAA whether there are any such inventions described in the proposal.

(4) Public release of information, correspondence, and documents received by FAA grantees is disclosed in accordance with the Freedom of Information Act (discussed in chapter 8).

b. Other Proprietary Information. Records or data concerning patents, trade secrets, and commercial or financial information that is privileged or confidential should be appropriately labeled and included as an enclosure to the proposal. Such information is held in confidence to the extent permitted by the law.

429. SPECIAL SECURITY CLEARANCES. Grant activities relating to countering terrorist acts against civil aviation may require personnel and facility security clearances.

430. - 439. RESERVED.

## SECTION 3. PROPOSAL REVIEW AND EVALUATION

440. RECEIPT AND ASSIGNMENT. Research proposals are assigned a proposal number upon receipt and acknowledged in writing.

441. PROPOSAL REVIEW.

a. Each proposal is reviewed by the grants office to ensure that it has been signed, that it is in an appropriate format, that all relevant information has been submitted, that it satisfies the conditions of a grant instrument, and that the proposed research falls under the research grant authority described in chapter 1.

b. If after initial review it is determined that another access vehicle other than a grants is more appropriate, the proposing organization will be notified and advised in writing by the grants office.

442. TECHNICAL MERIT.

a. Evaluation Teams. After initial proposal review, the proposal is reviewed carefully for technical merit by a technical evaluation team. The team consists of at least three federally employed technical peers and may include outside reviewers with prior approval from the grants office. An FAA representative is designated as the team leader. The team leader is responsible for developing an overall proposal rating based on the ratings of the individual team members.

b. Criteria. FAA has established criteria that proposals must meet to be eligible for funding. The criteria considered in evaluating a proposal are listed below:

(1) Technical merit and programmatic relevance to critical mission objectives, intrinsic scientific value, and merit.

(2) Establishment of logical connection and probable application to long-term growth of civil aviation will lead to new discoveries or fundamental advances within the field or will have substantial impact on progress in the specific or related fields pertinent to FAA research.

(3) Soundness of technical approach and concepts.

(4) Realistic costs, overall ability of the agency to fund the project, and benefits to be accrued in terms of the contribution to FAA objectives.

(5) Qualifications of the investigator, equipment, and facilities at the institution available to perform the research effort. Capability of the organization to carry on successful work.

c. Additional Resources Required. The grantee should identify specific resources that are required, and note whether adequate access to these exist or whether they will be acquired in the course of the proposed activity. Past achievement is considered in evaluating performance competence. The principal investigator should demonstrate an established reputation in the relevant field. Such reputation may be shown by publications, patents, conference contributions, or any other relevant information that demonstrates his or her capability to advance the state of knowledge in the proposed area.

d. Proposal Ratings. While meeting all criteria is necessary for eligibility, the research proposal is judged as a whole considering the above noted elements. All proposals are reviewed by discipline specialists in the area of the proposal. Some proposals are reviewed entirely in-house; others are evaluated by a combination of in-house experts and selected external reviewers. Due consideration is given to conflict-of-interest and protection of proposal information when outside reviewers are serving on evaluation teams.

(1) After initial proposal review, proposals over $100,000 are reviewed in-depth against criteria by a technical evaluation team. The team consists of at least three technical peers. An FAA representative is designated as the team leader. The team leader is responsible for developing an overall proposal rating based on the ratings of the individual team members.

(2) After initial proposal review, proposals under $100,000 are reviewed, using an abbreviated process, against criteria by a discipline specialist in the area of the proposal and one other technical evaluator. The discipline specialist is responsible for providing an overall proposal rating and recommendation.

(3) Evaluation processes are modified when the office discretionary funds are used rather than program office funds. After initial proposal review, proposals intended for office discretionary funding support are reviewed in-depth against criteria by a technical evaluation team consisting of at least three technical peers. The team leader is responsible for developing an overall proposal rating based on input of the individual team members and providing additional information to the grants office as required.

443. REVISIONS TO PROPOSALS. The grants office may have a need to engage in discussions with the applicant's principal investigator prior to awarding a grant. Discussion will occur after the grant proposal has been determined to be eligible for funding. Discussions may result in changes that do not alter the basic direction or intent of the proposal or result in changes outside the specific area of expertise of the principal investigator. Changes may be made to remove, add, or redirect specific areas of research in the proposal. If such changes occur, an appropriate proposal modification (which may include a revised proposal budget) signed by the principal investigator and the authorized organizational representative must be submitted to the grants office for incorporation into the proposal file.

444. RETURNED OR DECLINED PROPOSALS.

a. A returned proposal is one that has been returned to the applicant because it is determined to be ineligible. The proposal may be incomplete, inappropriate for consideration, or does not meet established criteria. The applicant is notified in writing by the grants office as to why the proposal is ineligible.

b. A declination is a written notice by the grants office advising that the proposal is eligible for funding but that due to lack of available funds, or change in program direction, grant assistance will not be provided.

445.-449. RESERVED.

## SECTION 4. GRANT AWARD

450. GRANT REQUEST. A grant request, FAA Form 9550-6, is used to initiate the grant awards approval process. Grants request processing is coordinated by the Office of Research and Technology Applications. The grant request form is used by the funding program office to identify the proposal selected for award, to establish the funding citations, to obtain the necessary signature authorities contained in chapter 2, and to track the processing of the proposal and award of the grant.

451. GRANT AWARD.

a. Eligible proposals funded through program money are supported by the cognizant program managers based on their research and development program requirements and the availability of funds.

b. Eligible proposals funded through discretionary grant money are supported by an oversight structure, based on the overall research and development requirements and the availability of funds.

c. In either situation, the office ensures an equitable geographic distribution of all grant funds and the inclusion of historically black colleges and universities and other minority institutions for funding consideration.

d. When applicable, proposed grant awards are processed through the OST Office of Public Affairs release process prior to transmittal to grantees.

452. GRANT AWARD INSTRUMENT. The following documents comprise a Grant award instrument.

a. The Award Letter, including any special provisions applicable to the award.

b. The budget, which indicates the amounts, by categories of expense, on which FAA has based its support.

c. The proposal referenced in the award letter.

d. General or special conditions applicable to the grant award.

e. Any brochure, program guide, or other issuance that may be incorporated by reference in the award letter.

453. GRANT PERIODS. Grants show an effective date, a performance period, and an expiration date.

a. Effective date is the beginning date specified in the grant letter on or after which expenditures may be charged to the grant.

b. Performance period is the period of time between the effective date and the expiration date of the grant shown as a number of months.

c. Expiration date is the ending date specified in the grant letter after which expenditures may not be charged against the grant, except to satisfy obligations to pay allowable projects costs committed on or before that date.

d. Significance of Performance Period. The grant award gives authority to the grantee to commit and expend funds for allowable costs in support of the project, up to the grant amount specified in the award letter, at any time during the grant period. Expenditures may not be charged against an grant prior to the effective date or subsequent to the expiration date.

454. GRANT AWARD AMENDMENTS. A grant award amendment modifies an existing grant award instrument and may include the following:

a. Administrative change may be accomplished as a unilateral action signed only by the Grants Officer and does not affect the substantive rights of the parties (e.g., a change in the paying office of the appropriation data or correcting typographical errors).

b. No cost extensions may extend the grant performance period for up to 1 year beyond the original expiration date shown on the grant award instrument. Such an extension may be made when no additional funds are required to be obligated by the awarding office, there will be no change in the project's originally approved scope or objectives, and any one of the following may apply:

(1) Additional time beyond the established expiration date is required to ensure adequate completion of the originally approved project.

(2) Continuity of grant support is required while a supplemental proposal is under review.

(3) The extension is necessary to permit an orderly phaseout of a project that will not receive continued support.

c. Additional funding may be required to meet unforeseen circumstances which do not significantly change the scope or objective of the program. Examples are emergency repairs to equipment, conversion of a lease to a purchase, very limited expansion of the effort, opportunity to obtain a newly available expensive item of research equipment, and modest funding needed to complete a project within the original project period.

d. Supplements provide for continuation of FAA support for one or more budget periods beyond the originally approved performance period. Situations frequently arise when it is necessary to supplement awards originally selected on a competitive basis.

(1) Supplements are appropriate when funding is for substantial expansion of a project that requires adding a budget period beyond the currently approved project period. Examples include changing the objectives of a project to take advantage of recent findings and expanding the scope of a project to include work on promising new leads developed under the original effort. Changes are appropriate when the original project period was approved for a period of time shorter than grant support was needed or the results of the original activity warrant support beyond the period originally recommended.

(2) Supplemental applications for expansion of project or program scope or research protocol is subject to objective review requirements. When approved and funded, the extended period of support is treated as an extension of the original project period.

(3) FAA will not approve requests for supplemental support for such purposes as defraying the costs of increases in salaries, wages, or staff benefits or for additional indirect cost reimbursement, whether caused by a change in the indirect cost rate or by changes in direct cost expenditures that affect the indirect cost base.

(4) Only in exceptional cases will more than one supplement be approved.

e. Major changes in scope or budget must be treated as new proposals. Changes leading to the issuance of an amendment may require the submission of additional supporting documentation by the grantee (e.g., budget or project description).

455.-499. RESERVED.

# CHAPTER 5. GRANTEE STANDARDS

500. GENERAL. OMB Circular A-110 prescribes three sets of standards for academic and other non-profit recipients of Federal grants. These standards govern financial management systems, procurement policies and procedures, and property management. There are comparable standards prescribed by 49 CFR, Part 18 "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments" (OMB Circular A-102) for State or local Government recipients of Federal grants.

501. POLICY. FAA extends the applicability of OMB standards contained in OMB Circulars A-102 and A-110 to all types of recipients of grants under the Research Grants Program, including commercial firms and others to whom neither 49 CFR, Part 18, (A-102) nor A-110 is directly applicable. FAA also requires prospective grantees to furnish basic organizational and management information to assist in assessing their financial and managerial responsibility.

502. FINANCIAL MANAGEMENT SYSTEMS STANDARDS. Grantees must have financial management systems that meet the requirements of OMB Circular A-110.

503. PROCUREMENT STANDARDS. OMB Circular A-110 prescribes standards for use by recipients in establishing procedures for the procurement of supplies, equipment, construction, and services with Federal funds. Grantees must adhere to these procurement requirements.

504. PROPERTY MANAGEMENT STANDARDS. Grantees must comply with the provisions of the property management standards contained in OMB Circular A-110.

505. PROSPECTIVE GRANTEE ORGANIZATION AND MANAGEMENT DATA. Each proposing institution or organization that has not received a grant award within the previous 2 years must submit basic organizational and management information and certifications to assist in assessing their financial and managerial responsibility. When requested by the grants office, the following information must be submitted:

a. Organization Name. Give the commonly used name of the organization, together with the legally registered name, if different, and mailing address.

b. Organization Type. Indicate the appropriate type of organization. If a U.S. college or university, show the Federal Interagency Committee on Education code, and category of control or affiliation, as shown in the most recent Directory of Postsecondary Institutions.

c. Federal Employer Identification Number. U.S. organizations must provide the employer identification number assigned by the Internal Revenue Service.

d. Congressional District. Applicable to organizations in the United States.

e. Organizational Affiliations. Describe relationship of the organization to any parent organization, subsidiaries, or other affiliates. If the organization is a successor in interest to a predecessor, or if changes in organizational affiliation are anticipated, describe briefly.

f. Statement of Purposes and Powers. Enclose an official or published statement of the major purposes of the organization and the powers that have been granted to it to enter into contractual relationships and/or to accept grants (e.g., articles of incorporation, terms of reference, or by-laws).

g. Key Officials. List the name, title, address, and telephone number of the following existing officials and their alternates:

(1) Chief Executive Officer. Grant letters normally are addressed to the Chief Executive Officer unless another appropriate addressee, such as the authorized organizational representative, is designated.

(2) Authorized Organizational Representative.

(3) Business Officer.

h. Affiliations of Key Officials. If the organization is other than a college or university, a State or local government, or an international organization, indicate whether or not each official listed in g., above, is affiliated with any international, Federal, State or local agency, or with any college or university. If so, describe such affiliation. FAA reserves the right to consult with such affiliated organizations.

i. Federal Awards. Give a representative listing of current or recent Federal awards to the organization indicating agency, award number, award amount, award duration, and title of project.

j. Indirect Cost Agreement. Provide a copy of the most recent indirect cost agreement negotiated between the organization and the cognizant Federal negotiating agency, Federal agency or, if no such agreement exists, an indirect cost rate proposal.

k. Salary Rates. Provide a copy of the most recent salary rates of principal faculty and staff involved in the proposed research effort.

l. Other. If other than a college or university, or a State or local government, also submit the following:

(1) A certified statement of financial condition covering at least the preceding 2 years.

(2) Bank and other references.

506.-599. RESERVED.

# CHAPTER 6. EXPENDITURES

## SECTION 1. ALLOWABLE COSTS

600. GENERAL. Expenditures under grants are governed by Federal cost principles applicable to specific types of grantees. Grantees are responsible for determining costs in accordance with applicable regulations.

601. INSTITUTIONS OF HIGHER EDUCATION. Principles for determining the costs applicable to research and development and to training and other educational services performed by colleges and universities under Federal Government grants and contracts are contained in OMB Circular A-21, Cost Principles for Educational Institutions. This circular is applicable to all awards to both public and private institutions of higher education. Also, see Federal Acquisition Regulation (FAR) Subpart 31.3 at 48 CFR 31.3.

602. OTHER NON-PROFIT ORGANIZATIONS. Expenditures under grants are governed by OMB Circular A-122, Cost Principles for Non-profit Organizations, which applies to costs of grants, contracts, and other agreements with certain non-profit organizations. Also, see FAR Subpart 31.7. OMB Circular A-122 is not applicable to colleges and universities governed by OMB Circular A-21; or to State, local, and federally recognized Indian tribal Governments or hospitals governed by OMB Circular A-87, Cost Principles for State and local Governments. See also FAR Subpart 31.108.

603. COMMERCIAL FIRMS. The Governmentwide cost principles and procedures for use in cost-reimbursement type supply and research contracts with commercial organizations, contained in FAR Subpart 31.2, are applicable to grants to commercial organizations.

604. STATE AND LOCAL GOVERNMENTS. OMB Circular A-87 and FAR Subpart 31.6 provide principles and standards for determining costs applicable to grants and contracts with State, local, and federally recognized Indian tribal Government entities (excluding publicly financed colleges, universities, and hospitals).

605. APPLICABILITY TO CONTRACTS UNDER GRANTS. Grantees are responsible for ensuring that all contracts awarded under FAA grants comply with appropriate contract laws and procedures.

606.-619. RESERVED.

## SECTION 2. PAYMENT REQUIREMENTS

620. GENERAL. The procedures prescribed in this section are based largely on selected portions of the uniform administrative requirements contained in OMB Circular A-110, Grants and Agreements with Institutions of Higher Education, Hospitals, and other Non-profit Organizations.

621. GRANT ACCEPTANCE. The acceptance of a grant from FAA creates a legal duty on the part of the grantee organization to use the funds or property made available in accordance with the conditions of the grant. FAA has reversionary interest in any funds improperly applied or in property improperly acquired through the grant, to which FAA either retains title or reserves the right to require title transfer.

622. DEFINITIONS. The following definitions are either not included elsewhere in the order or are repeated in this section because of their special applicability to this chapter.

a. Grantee is the recipient organization to which a grant is awarded.

b. Business Officer is the financial official of the grantee organization who has primary responsibility for the accountability for and reporting on grant funds.

c. Cash on Hand includes FAA funds on deposit, imprest funds, and undeposited Treasury checks.

d. Disbursements are payments in cash, check, or electronic funds transfer.

e. Expenditures are outlay charges made to the project during a given period for:

(1) Goods and other tangible property received.

(2) Services performed by employees, contractors, and other payees.

(3) Amounts becoming owed for which no current services or performance is required.

f. Obligations are the amounts of orders placed, contracts awarded, services received, and similar transactions occurring during a given period that require payment by the grantee during the same or a future period.

g. Unliquidated Obligations, for reports prepared on a cash basis, represent the amount of obligations incurred by the grantee that have not been paid. For reports prepared on an accrued expenditure basis, unliquidated obligations represent the amount of obligations incurred by the grantee for which an outlay has not been recorded.

h. Unobligated Balance is the portion of the funds authorized by the grant that has not been obligated by the grantee. It is determined by deducting outlays and unliquidated obligations from the cumulative funds authorized.

623. PAYMENT PROCEDURES.

a. Reimbursement. The grantee can finance its operations with its own working capital, and payments are made quarterly to reimburse the grantee for actual cash disbursements based on the submission of an SF-270, Request for Advances or Reimbursement.

b. Working Capital Advance. In those cases where the procedures for reimbursement described in paragraph 623a are not feasible, arrangements may be made whereby the Federal share of operations of the grantee are financed on a working capital advance basis. On this basis, funds may be advanced to the grantee to cover estimated disbursement needs for an initial period. This is accomplished by submitting an SF-270. Grantees are required to deposit all cash received from FAA into separate interest-bearing accounts. The interest generated is to be remitted to FAA at least quarterly, accompanied by a copy of the bank statements(s) for the period covered. Grantees are allowed to retain interest accrued up to $100 per year for administrative expenses.

624. PAYMENT METHODS.

a. The method of payment to a recipient organization is by check or electronic funds transfer.

(1) Direct Treasury Check Method. The method whereby payment is made directly to a recipient organization by the responsible office of the Federal Program Agency. Checks are issued from the U.S. Treasury upon approval and processing by the FAA Technical Center accounting section.

(2) Electronic Funds Transfer Method. Funds are transferred electronically between the U.S. Treasury and participating financial institution through the Automated Clearing House (ACH) Network. Information requested on SF 3881, ACH Vendor/Miscellaneous Payment Enrollment Form, is required for processing the electronic funds transfer.

625. FINANCIAL REPORTING REQUIREMENTS.

a. Quarterly Disbursement Reporting. Within 15 days after the end of each calendar quarter, the grantee must provide an updated SF-272, Federal Cash Transactions Report when funds are advanced in excess of $10,000. The report elements are in compliance with the uniform Federal standards applicable to financial reporting by grantees. An original and one copy of the completed form must be mailed to FAA Technical Center accounting section. If the information contained in the SF-272 is not adequate, the accounting section will require the grantee to complete an SF-269, Financial Status Report.

b. Final Disbursement Reporting. Within 90 days after the grant expiration date, the grantee must submit form SF-269 to the accounting section for final grant accountability. The final disbursement amount may not exceed the amount of the grant. When the final disbursements are recorded by FAA, the grant is financially closed.

626. WITHHOLDING PAYMENTS. FAA reserves the right, upon written notice, to withhold future payments after a specified date if the recipient:

a. Fails to comply with the conditions of an award, including the reporting requirements.

b. Is indebted to the U.S. Government.

627. SAFEGUARDING FUNDS. FAA-furnished funds should not be co-mingled with the personal funds of, or to be used for personal purposes by, any officer, employee, or agent of the grantee; nor should any of these funds be deposited in personal bank accounts for disbursement by personal check.

628. FINAL UNOBLIGATED BALANCE. FAA has a reversionary interest in the unobligated balance of a grant upon expiration or completion of the grant. Based on final disbursements reported on the SF-272, the final unobligated balance is to be computed by FAA and reported to the grantee. If the grantee's funding has been fully advanced and the unobligated balance deduction results in a negative balance, the grantee must refund by check, payable to FAA, the amount of the negative balance.

629. ERRONEOUS PAYMENTS. Reimbursements made in error must be refunded by check, payable to FAA, if the erroneous payment creates an excess Federal cash-on-hand condition. Excess funds should be promptly refunded, and redrawn when needed, if the funds are erroneously drawn in excess of immediate disbursement needs. The only exception to the requirement for prompt refunding is when the funds involved will be disbursed within 7 calendar days. This exception to the requirement for prompt refunding should not be construed as approval by FAA for a grantee to maintain excessive funds; they are applicable only to excessive amounts of funds that are erroneously drawn.

630. INTEREST EARNED. Interest earned by other than State agencies must be reported to FAA quarterly on the SF-272 and remitted by check payable to FAA.

631. PROGRAM INCOME. FAA delegates decisions on the expenditure and application of program income generated in the course of a grant award to the grant recipient. OMB Circular A-110 specifies alternatives for utilization of program income as follows:

a. Additive alternative. The funds may be used for the same purposes and under the same conditions stated in the grant agreement to augment the research activities.

b. Matching alternative. In the case of grant awards that require non-Federal matching funds, project income my be used to finance part or all of the non-Federal matching share.

c. Deductive alternative. Program income is deducted from the total grant award.

632. OTHER COST CREDITS. Purchase discounts, rebates, allowances, credits resulting from overhead rate adjustments, and other credits relating to any allowable cost received by or accruing to the grantee are credited against FAA grant costs if the grant has not been closed out. A grant is closed out when the final net disbursements are reported on the SF-272 and FAA Form 9550-5, Final Project Report, is submitted to and accepted by FAA. If the grant is closed out, cost credits are accepted only if the amount is $300 or more. Such credits must be approved by the Grants Officer.

633. USE OF MINORITY BANKS. Recipients of awards are encouraged by the Federal Government to use minority banks. Minority banks are those that are owned (at least 50 percent) by minority groups such as Black, Hispanic, Asian, Native American, Pacific Islander, and women. This action is consistent with the national goal of expanding the opportunities for minority business enterprises.

634.-699. RESERVED.

# CHAPTER 7. PROJECT AND GRANT MANAGEMENT

## SECTION 1. MONITORING PROJECT PERFORMANCE

700. GENERAL. OMB Circular A-110 contains criteria and procedures to be followed by Federal agencies for monitoring and reporting program performance for all grant recipients. Grant recipients will adhere to the required procedures.

701. GRANTEE will monitor the performance of the project, program, subaward, function or activity supported by the award to ensure time schedules are being met, other performance goals are being achieved, the terms of the grant instrument are being met, and sound management practices and organizational policies are being used.

702. SITE VISITS. The technical monitor may make site visits, as appropriate, to keep informed of the progress of the work, and the Grants Officer may make site visits, as appropriate, to review grantee management systems.

703. GRANTEE PRIOR APPROVALS. A grantee has full responsibility for the conduct of the project or activity supported under an award and for adherence to the award conditions. To carry out responsibilities for monitoring project performance effectively and for adhering to grant terms and conditions, each grantee organization must agree to comply with the applicable Federal requirements for grants and cooperative agreements, and to manage all expenditures or actions affecting the grant prudently. Documentation for each expenditure or action affecting the grant must reflect appropriate institutional reviews or approvals, and should be made in advance of the action to ensure consistency with applicable regulations.

704. APPROVALS. To carry out project monitoring responsibilities that require FAA approvals, FAA officials have the following responsibilities:

a. Technical Monitor reviews requests for changes in project direction or management or for rebudgeting. Except where FAA approval must be issued by the Grants Officer (approval requirements contained throughout this chapter), the technical monitor furnishes FAA approval, or disapproval, in writing, to the principal investigator, with copies to the authorized organizational representative and the grants office.

b. Grants Officer. The Grants Officer approves, as indicated throughout this chapter, and coordinates the response with the technical monitor, and furnishes FAA decision to the authorized organizational representative, with copies to the technical monitor and the principal investigator.

705. FAA-GRANTEE RELATIONSHIP. A grantee has full responsibility for the conduct of the project or activity supported under an award and for adherence to the award conditions. The grantee is in the best position to determine the means by which the activity or project can be performed most effectively. The relationship between FAA, the grants office, and the grantee, through the principal investigator, is a partnership. Grantees are encouraged to seek advice and opinions on technical issues and problems that may arise. Such advice and opinion, when given by FAA, does not imply that the responsibility for the conduct of the project has shifted to FAA.

706.-719. RESERVED.

## SECTION 2. CHANGES IN PROJECT DIRECTION OR MANAGEMENT

720. GENERAL. OMB Circular A-110 contains criteria and procedures to be followed by Federal agencies for changes in project direction or management for all recipients of FAA grants. Grant recipients will adhere to the required procedures.

721. CHANGES IN OBJECTIVES, SCOPE, OR METHODOLOGY. OMB Circular A-110 requires changes from the original objective or scope and its cost impact be approved by the Grants Officer. Such changes should be proposed to the technical monitor by the principal investigator, in writing, and countersigned by the authorized organizational representative for approval by the Grants Officer. The principal investigator, operating within the established policies of the grantee organization, is free to pursue interesting and important leads that may arise during the conduct of the project to adopt an alternative approach that appears to be a more promising means of achieving the goals of the project. Any change in the conduct of the project affecting the probability of project completion is reported to the technical monitor.

722. CHANGES IN THE PRINCIPAL INVESTIGATOR OR LEVEL OF EFFORT.

a. The decision to support a proposal is based largely on the proposed principal investigator's knowledge, capability, and availability to direct the research of the subject grant at the grantee institution. When it is anticipated that the principal investigator is no longer able to direct the project, or the level of involvement of the principal investigator decreases to such a level that effective leadership is no longer possible, the cognizant technical monitor shall be informed immediately. Unless satisfactory alternative arrangements are made, these circumstances may be grounds for revocation of the grant award by FAA.

b. In the event that a grantee desires to continue the project with a substitute principal investigator, the grants office must be notified in writing of the substitute's name and qualifications. If approved by the Grants Officer, the grant will be amended. If not, grant termination will be initiated. Awards cannot be transferred from one institution to another. If the principal investigator wishes support for the research at another institution, he or she must submit a new proposal through the appropriate office of the new institution.

723. CONTRACTING OR TRANSFERRING THE PROJECT EFFORT. Excluding the purchase of commercially available supplies, materials, equipment, or general support services allowable under the grant, no significant part of the research or substantive effort under an FAA grant may be contracted or otherwise transferred to another organization, unless it was disclosed in the proposal submission or evidence of FAA prior approval appears in the grant instrument.

724.-729. RESERVED.

## SECTION 3. CHANGES IN THE GRANT BUDGET

730. GENERAL. OMB Circular A-110 contains criteria and procedures to be followed by Federal agencies in providing post-award changes in grants to academic and other organizations for any type of project. The criteria and procedures are similar to those prescribed by OMB Circular A-102 for grants to State and local governments. Grant recipients will adhere to the required procedures.

731. POLICY. The principal investigator, operating within the established policies of the grantee, is best qualified to determine the manner in which the grant or cooperative agreement funds may be used most effectively to accomplish the proposed research. FAA assumes no responsibility for overspent budgets. The investigator and the grantee institution are free to spend grant or cooperative agreement funds for the proposed research without strict adherence to individual allocations within total budgets, except as provided below:

a. Acquisition of property, costing in excess of $2,500 and not included in the approved proposed budget, requires the prior approval of the Grants Officer unless the item is a functional replacement of an item shown in the approved proposed budget.

b. Whenever the amount of Federal funds authorized by a grant is expected to exceed the requirements of the project, as outlined in the approved proposal, the principal investigator, with the approval of the grantee institution, notifies the grants office.

732. PROCEDURE. When a budget revision requires FAA approval, two copies of a request, signed by the principal investigator, are sent to the grants office with a copy to the technical monitor. The request should clearly state which budget items are to be revised and by what amounts and should explain the reasons for change.

733. COST SHARING AND MATCHING. Grantees are encouraged to participate in cost sharing and matching as prescribed in OMB Circular A-110.

734.-739. RESERVED.

## SECTION 4. SUSPENSION, TERMINATION, AND ENFORCEMENT

740. GENERAL. OMB Circular A-110 contains criteria and procedures to be followed by Federal agencies for the suspension and termination procedures for Federal grant awards. Grant recipients will adhere to the required procedures.

741. DEFINITIONS. The following terms have the indicated meanings:

a. Suspension is an action by FAA that temporarily withholds Federal support of a project pending corrective action by the grantee or a decision by FAA to terminate the grant.

b. Termination is the cancellation of a grant, in whole or in part, at any time prior to its expiration.

c. Enforcement is the action by FAA to ensure the grantee organization effectively carries out the terms and conditions of the grant award.

742. INTENT. It is the intent of FAA to establish and maintain mutually beneficial grant relationships. Suspension or termination of grants prior to the planned completion date is reserved for those few exceptional situations that cannot be handled any other way.

a. A grant may be suspended or terminated in whole, or in part, in any of the following situations:

(1) When FAA believes that the grantee has materially failed to comply with the terms and conditions of the grant award.

(2) When funding appropriations are not available and/or the results achieved do not warrant continued support under a continuing grant, the continuing grant may be terminated at the expiration of an increment of funding.

(3) For any reason by mutual agreement between FAA and the grantee upon the request of either party.

b. Action by FAA to suspend or terminate a grant is taken only after the grantee has been informed by FAA of a deficiency on its part and given an opportunity to correct it. FAA promptly notifies the recipient in writing of the determination and the reasons for termination or suspension, together with an effective date. The effective date shall provide for a 72-hour response period prior to the date, during which time the grantee may respond by telephone or in writing to the notice of intent to suspend or terminate.

c. No costs incurred during a suspension period or after the effective date of a termination are allowable. Exceptions are those costs which, in the opinion of FAA, the grantee could not reasonably avoid or eliminate, or which were otherwise authorized by the suspension or termination notice, provided such costs would otherwise be allowable under the terms of the grant and the appropriate Federal cost principles.

d. Within 30 days of the termination date, the grantee must furnish a summary of progress under the grant and an itemized accounting of costs incurred prior to the termination date or pursuant to paragraph 742c. Final allowable costs under a termination settlement shall be in accordance with the terms of the grant, including this section, and the appropriate Federal cost principles, giving due consideration to the progress under the grant. In no event will total FAA payments under a terminated grant exceed the grant amount.

743. PROCEDURE.

a. When it is believed that a grantee has failed to comply with one or more of the terms and conditions of a grant, the Grants Officer advises the grantee in writing of the nature of the problem and that failure to correct the deficiency may result in suspension or termination of the grant. The grantee will be requested to respond in writing within 30 calendar days of the date of such letter, describing the action taken or the plan designed to correct the deficiency. Copies of such correspondence will be furnished to the principal investigator and to the technical monitor.

b. If a satisfactory response is not received within the above period, the Grants Officer may issue a notice immediately suspending authority to obligate grant funds further, in whole or in part. Notice of suspension is sent by certified mail, with a return receipt requested, to the authorized organizational representative, with a copy to the principal investigator. Within FAA, copies are furnished to ACT-122 and to the technical monitor. The notice sets forth the terms of the suspension and its effective date.

c. The suspension remains in effect for a maximum of 60 days to allow the grantee to take corrective action. In the event that the deficiency is not corrected to the satisfaction of FAA, the Grants Officer may issue a notice of termination, subsequent to review by legal counsel. The notice sets forth the reasons for the action and its effective date.

744. TERMINATION BY MUTUAL AGREEMENT. Circumstances may arise in which either FAA or the grantee wishes to terminate a project. If both parties agree that continuation of the project would not produce results commensurate with the further expenditure of funds, or for any other reason, the grant may be terminated by mutual agreement. The procedures are as follows:

a. If the grantee wishes to terminate the project, the authorized organizational representative should advise the Grants Officer in writing and send a copy to the technical monitor.

b. If FAA wishes to terminate the project, the Grants Officer advises the grantee's authorized organizational representative in writing and sends copies to the principal investigator and the technical monitor.

c. Within 30 days after receipt of request from either party for termination by mutual agreement, the other party will provide an appropriate written response.

d. Upon agreement by both parties, grant closeout procedures are initiated.

745. MISCONDUCT. The Grant Recipient is primarily responsible for preventing, detecting, investigating, and correcting misconduct involving individual researchers or misconduct governing science and engineering research. When the institution fails to take corrective action, or in cases of misconduct charges that involve the institution, FAA will deal with the misconduct charge as appropriate.

746. ENFORCEMENT. OMB Circular A-110 outlines the following guidelines for enforcement of Federal grants awards.

a. Remedies for noncompliance. If a recipient materially fails to comply with the terms and conditions of an award, whether stated in a Federal statute, regulation, assurance, application, or notice of award, the Federal awarding agency may take one or more of the following actions, as appropriate in the circumstances.

(1) Temporarily withhold cash payments pending correction of the deficiency by the recipient or more severe enforcement action by the Federal awarding agency.

(2) Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.

(3) Wholly or partly suspend or terminate the current award.

(4) Withhold further awards for the project or program.

(5) Take other remedies that may be legally available.

b. Effects of suspension and termination. Costs of a recipient resulting from obligations incurred by the recipient during a suspension or after termination of an award are not allowable unless the awarding agency expressly authorizes them in the notice of suspension or termination or subsequently.

c. Relationship to debarment and suspension. The enforcement remedies identified in this section, including suspension and termination, do not preclude a recipient from being subject to debarment and suspension under Executive Orders 12549 and 12689 and 49 CFR part 29.

747.-749. RESERVED.

## SECTION 5. GRANT REPORTING REQUIREMENTS

750. GENERAL. OMB Circulars A-110 and A-102 contain criteria and procedures to be followed by Federal agencies for reporting and closeout requirements including implementation of the financial and technical reporting requirements and closeout procedures. Grant recipients will adhere to the required procedures.

751. QUARTERLY DISBURSEMENT REPORTING. Within 15 days after the end of each calendar quarter, the grantee shall provide an updated Federal Cash Transactions Report, SF-272, to FAA. The report elements are in compliance with the uniform Federal standards applicable to financial reporting by grantees. An original and one copy of the completed form must be mailed to the FAA Technical Center accounting section. If information contained in the SF-272 is not adequate, the accounting section will require the grantee to complete an SF-269, Financial Status Report.

752. PROGRESS REPORTS. Principal investigators submit progress reports to the technical monitor and the grants office.

a. Contents of Progress Reports. Unless otherwise specified in the grant instrument, progress reports shall include:

(1) A summary of overall progress, including results obtained to date, and a comparison of actual accomplishments with proposed goals for the period.

(2) An indication of any current problems or favorable or unusual developments.

(3) A summary of work to be performed during the next budget period.

(4) Other information pertinent to the project being funded or as specified in the terms and conditions of the grant.

b. Timing of Progress Reports. Unless otherwise specified in the grant instrument, progress reports are submitted semiannually, with the final report due within 90 days after the expiration of the grant.

753. FINAL DISBURSEMENT REPORTING. Grantees are rquired to submit an SF-269 for purposes of final grant accountability not more than 90 days following the expiration of the grant. The final disbursement amount may not exceed the amount of the grant. When the final disbursements have been recorded by FAA, the grant will be closed financially.

754. FINAL PROJECT REPORT. Within 90 days following the expiration date of the grant, one copy of FAA Form 9550-5, Final Project Report, must be submitted to the technical monitor and one copy to the grants office. This form contains a summary of the completed project that will be used to answer inquiries by non-scientists as to the nature and significance of the research. The form also includes space to indicate the status of submission of the final technical information items for FAA program use.

755. FINAL TECHNICAL INFORMATION ITEMS. As soon as they are available after completion of the project, the following technical items must be submitted for program management use:

a. Thesis abstract, if applicable.

b. Publication citations and article reprints.

c. Data on scientific collaborators.

d. Information on inventions, patents, licensing.

e. Technical description and results of the project.

f. Other materials required in the award instrument.

756. COMPLIANCE WITH REPORTING REQUIREMENTS. The FAA Technical Center accounting section monitors report submissions to ensure that the requirements for final disbursement information are fulfilled. The technical monitor is responsible for assuring that the final project reports on prior, expired awards have been submitted by principal investigators before new awards are made to those individuals.

757. GRANT CLOSEOUT. Grant closeout is the process by which FAA determines that all applicable administrative actions and all required work of the grant are complete. Grants are closed upon receipt of final disbursement information in the final project report, and after determination that any other administrative requirements in the grant instrument have been met. In the event a final audit has not been performed prior to the closeout of the grant, FAA reserves the right to recover appropriate amounts after fully considering the recommendations on disallowed costs resulting from the final audit.

758.-759. RESERVED.

## SECTION 6. RECORDS RETENTION AND AUDIT

760. GENERAL. OMB Circular A-110 and OMB Circular A-102 contain requirements to be followed by Federal agencies concerning retention and custodial requirements for grant records.

761. REQUIREMENTS.

a. Financial records, supporting documents, statistical records, and other records pertinent to a grant are retained by the grantee for a period of 3 years from submission of the Final Project Report except that:

(1) Records that relate to audits, appeals, litigation, or the settlement of claims arising out of the performance of the project are retained until such audits, appeals, litigation, or claims have been resolved.

(2) Records relating to projects subject to the project income provisions discussed in chapter 8 are retained for 3 years after the end of the grantee's fiscal year in which the grant letter requirements for reporting income expires.

b. Unless court action or audit proceedings have been initiated, the grantee may substitute microfilm copies of original records provided such microfilming is in compliance with the latest edition of FAA Order 1350.20, Micrographics/Electronic Image Management Program.

c. The Aviation Research Grants Officer and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any pertinent books, documents, papers, and records of the grantee organization (and of the performing organization, if different) to make audits, examinations, excerpts, and transcripts. Further, any negotiated contract in excess of $10,000 made by the grantee shall include a provision to the effect that the grantee, FAA, the Comptroller General, or any of their duly authorized representatives, shall have access to pertinent records for similar purposes.

d. To avoid duplicate recordkeeping, FAA may make special arrangements with grantees to retain any records that are needed for joint use. FAA may request transfer to its custody records not needed by the grantee when it determines that the records possess long-term, retentive value. When the records are transferred to or maintained by FAA, the 3-year retention requirement is not applicable to the grantee. In the rare event that these provisions are exercised, FAA will negotiate a mutually agreeable arrangement with the grantee regarding reimbursement of costs.

762.-799. RESERVED.

# CHAPTER 8. OTHER CONSIDERATIONS

## SECTION 1. ANTI-DISCRIMINATION STATUTES

### 800. GENERAL.

a. A number of statutes bar recipients of Federal financial assistance from excluding persons, because of their race, sex, color, or national origin, from participation in federally supported activities. These include Title VI of the Civil Rights Act of 1964 (barring discrimination on grounds of race, color, or national origin); Section 504 of the Rehabilitation Act (barring discrimination against the handicapped); and the Age Discrimination Act. Title IX of the Educational Amendments of 1972 bars sex discrimination in federally assisted education programs or activities. In addition to statutory prohibitions, Executive Order 11246 bars various types of discriminatory employment practices under grants for construction.

b. When a grant recipient receives an Equal Opportunity Complaint, a copy of the original complaint should be sent to the Office of Research and Technology Applications, which will retain a file copy and forward a copy to the cognizant Office of Civil Rights.

c. When a recipient of an FAA award receives an Equal Opportunity Complaint relative to Executive Order 11246, a copy of the original complaint should be sent to the U.S. Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), and a copy sent to the Office of Research and Technology Applications.

### 801. CIVIL RIGHTS ACT OF 1964.

a. Background. Section 602 of the Civil Rights Act of 1964 (Public Law 88-352; 42 U.S.C. 2000d et seq.) provides that no person in the U.S. shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving Federal financial assistance, and requires that each Government agency that is empowered to extend such financial assistance issue rules or regulations implementing Title VI of the Act with respect to such programs or activities administered by the agency.

b. DOT Regulations. DOT regulations implementing Title VI of the Civil Rights Act are contained at 49 CFR Part 21. These regulations are also applicable to any subrecipients such as subgrantees, contractors and subcontractors of a grantee, and successors in interest, other than subrecipients for commercially available supplies, materials, equipment, or general support services. The regulations require that as a condition of approval of an application for assistance, the applicant must execute the Assurance of Compliance form, whether or not a similar assurance form has been filed with another Federal agency.

c. Assurance of Compliance. Copies of the Assurance of Compliance form are available from the Office of Research and Technology Applications. The signed original should be mailed to the grants office. Once a properly executed form has been filed with FAA, it will cover all future applications to FAA. Acceptance of a subsequent grant constitutes affirmation that the Assurance of Compliance will be fully applicable to the grant.

d. Civil Rights Assurance--Subrecipients. Before any organization serves as a subrecipient on the grant (for other than the provision of commercially available supplies, materials, equipment, or general support services), it must first file an Assurance of Compliance form with either the grantee or FAA.

e. Grant Provisions. Each grant contains, as part of the standard grant conditions, an article implementing Title VI.

802. REHABILITATION ACT of 1973.

a. Background. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) provides that "no otherwise qualified handicapped individual in the United States...shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

b. DOT Regulations. DOT regulations implementing Section 504 are found at 49 CFR Part 27. Relevant regulations implementing Section 504 are found at 14 CFR Part 382. These regulations also apply to subrecipients such as subgrantees, contractors and subcontractors of a grantee, and successors in interest (other than subrecipients for the provision of commercially available supplies, materials, equipment, or general support services).

c. Assurance of Compliance. In lieu of requiring the submission of a separate handicap assurance or certification, either on a one-time basis or repeatedly with the submission of each proposal, as determined by the Grants Officer, each grant will contain an express assurance statement requiring the grantee to fulfill its handicap obligations under FAA rules.

d. Rehabilitation Assurance--Subrecipients. In lieu of requiring grantees to obtain separate assurances or certifications from subgrantees (subrecipients) receiving financial assistance under the grant, grantees will include in all agreements with subrecipients (for other than the provision of commercially available supplies, materials, equipment, or general support services), a handicap assurance statement comparable to that included in grants.

e. Grant Conditions. Each grant, as part of the standard grant conditions, shall implement Section 504 of The Rehabilitation Act of 1973 and the associated FAA regulations. The assurance requirement of those conditions will be satisfied as indicated in paragraphs 802c and 802d.

803. TITLE IX--SEX DISCRIMINATION. Subject to certain exceptions regarding admission policies at certain religious and military institutions, Title IX of the Education Amendments of 1972 (20 U.S.C. 1681-1686) prohibits the exclusion of persons on the basis of sex from any education program or activity receiving Federal financial assistance. Neither DOT nor FAA have issued any rules or regulations further implementing these statutory provisions with respect to its programs. FAA interprets the statute as applying to grants under its various science and engineering education programs, but not to grants under non-education programs such as grants for scientific and engineering research. All grantees under science and engineering education programs are expected to comply with Title IX.

804. AGE DISCRIMINATION ACT.

a. Background. The Age Discrimination Act of 1975, as amended (42 U.S.C. 6101 et seq.), provides that pursuant to regulations issued by the Department of Health and Human Services "no person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance."

b. Grant Conditions. Each grant, as part of the standard grant conditions, shall be conducted in compliance with the provisions of the Age Discrimination Act of 1975.

805. EQUAL EMPLOYMENT OPPORTUNITY UNDER EXECUTIVE ORDER 11246.

a. Background. Executive Order 11246, as amended, requires contractors and subcontractors performing federally assisted construction projects to provide equal opportunity, without regard to race, color, religion, sex, or national origin, to persons employed or seeking employment with them.

b. Grant Conditions. In instances when Executive Order 11246 is applicable, the grant instrument will include an equal opportunity clause in conformance with regulations issued by the Secretary of Labor at 41 CFR 60.

806.-819. RESERVED.

## SECTION 2. PROTECTION OF LIVING ORGANISMS

820. HUMAN SUBJECTS.

a. The protection of the rights and welfare of human subjects involved in research, development, and related activities supported by grants is the responsibility of the grantee.

b. Before a grant involving use of human subjects can be made, FAA must receive a statement that the research has been reviewed and approved by the appropriate Institutional Review Board at the grantee organization (or that the research is exempt from such review), and that the grantee by general assurance to the Department of Health and Human Services (DHHS) ensures FAA that it will comply with the Model Federal Policy for Protection of Human Subjects, including especially those relating to informed consent. This statement needs to be submitted to the FAA program processing the proposal as soon as possible. Applications from institutions not having a general assurance on file with DHHS will first be reviewed for scientific merit. If a decision to support the proposal is reached, FAA will negotiate a special assurance.

c. Grantees are referred for guidance to the Federal Register, Volume 51, No. 106, pages 20204-20217, June 3, 1986, Proposed Model Federal Policy for Protection of Human Subjects.

821. ANIMAL WELFARE.

a. The grantee is responsible for the humane care and treatment of vertebrate animals used or intended for use in such activities as field or laboratory research, development, training, education, or biological testing or for related purposes supported by FAA grants.

b. Any grantee performing activities that use vertebrate animals will comply with the Animal Welfare Act (Public Law 89-544, 1966, as amended by Public Laws 91-579, 94-279, and 99-198), 7 U.S.C. 2131 et seq.) and the regulations promulgated thereunder by the Secretary of Agriculture (CFR Title 9, Subchapter A, Parts 1, 2, 3, and 4) pertaining to the care, handling, and treatment of vertebrate animals held or used for research, teaching, or other activities supported by Federal awards. The grantee is expected to ensure that the guidelines described in National Institute of Health publication No. 85-23 (Revised 1985), Guide for the Care and Use of Laboratory Animals, are followed and to comply with the "U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training."

c. Before a grant involving the use of vertebrate animals in either field or laboratory activities can be made, FAA must receive a statement that the proposed activity has been reviewed and approved by the appropriate Institutional Animal Care and Use Committee at the grantee organization, and that the grantee, by general assurance to the Public Health Service (PHS), ensures that it will comply with the PHS Policy on Humane Care and Use of Laboratory Animals (September 1986 revision).

(1) If at all possible, this statement should be included in the proposal at the time it is submitted to FAA.

(2) If a delay in providing the statement is necessary, the statement should be submitted to the program processing the proposal as soon as possible.

(3) No awards involving vertebrate animals can be made without this statement.

(4) For continuing grants, this statement must be provided before the first year of the award can be activated. For subsequent annual increments of continuing grants, no further statement is necessary unless the protocols for use of vertebrate animals have been changed substantively from those originally proposed and approved.

(5) Applications from institutions not having a general assurance on file with the PHS will be reviewed first for scientific merit.

(6) If a decision to support the proposal is reached, FAA will arrange for a special assurance to be negotiated.

d. For proposals submitted involving the use of vertebrate animals, sufficient information should be provided to allow for evaluation in respect to the choice of species, the number of animals to be used, and any necessary exposure of animals to discomfort, pain, or injury. All such proposals should have the statement "Animal Welfare information included" added to the cover page.

e. The grantee may request registration of its facility and a current listing of licensed dealers from the regional office of the Animal and Plant Health Inspection Service (APHIS), USDA, for the region in which the research facility is located. The location of the appropriate APHIS regional office, as well as information concerning this program, may be obtained by contacting the Chief Staff Officer, Animal Care Staff, USDA/APHIS, Federal Center Building, Hyattsville, Maryland 20782.

f. Single copies of the NIH Guide for the Care and Use of Laboratory Animals are available from the Division of Research Resources, Building 31, Room 4B59, National Institutes of Health, 9000 Rockville Pike, Bethesda, Maryland 20892. Single copies of the PHS Policy on Humane Care and Use of Laboratory Animals are available from the Office for Protection from Research Risks, Building 31, Room 4B09, National Institutes of Health, 9000 Rockville Pike, Bethesda, Maryland 20892.

822. MARINE MAMMAL PROTECTION. The protection of marine mammals in research activities supported by grants is the responsibility of the grantee. Proposals submitted in support of marine research activities will include a statement that the grantee will comply with the Marine Mammal Protection Act of 1972, Public Law 92-522.

823.-829. RESERVED.

## SECTION 3. INFORMATION HANDLING

### 830. QUESTIONNAIRES: DATA COLLECTION UNDER GRANTS.

a. Paperwork Control. Under the Office of Management and Budget (OMB) regulation "Controlling Paperwork Burdens on the Public" (5 CFR 1320), a grantee's obtaining of information from 10 or more persons by means of identical questions is considered to be "sponsored" by FAA if the grantee is collecting the information at the specific request of FAA or the terms of the grant require specific approval of the collection or its procedures. If either of these conditions is met, OMB approval of the data collection is generally required and grantees should obtain the necessary control number from the technical monitor.

b. Policy on Data Collection. Data collection activities of grantees are the responsibility of grantees, and FAA support of a project does not constitute approval of the survey design, questionnaire content, or data collection procedures. No representation may be made to respondents that such data are being collected for or in association with FAA, the Department of Transportation, or the Government. However, this requirement is not intended to preclude mention of FAA support of the project in response to an inquiry or acknowledgment of such support in any publication of this data.

### 831. RELEASE OF INFORMATION.

a. Routine Information Releases. Listing of FAA assistance awards made within a particular State are available to the States through the Federal Assistance Award Data System on a quarterly basis.

b. Press Releases. Grants for projects that appear to be of special interest to the general public may be made the subject of an FAA or a joint FAA/grantee organization press release to the news media. Notification of all pending grants in excess of $1,500,000 shall be furnished to the Office of the Secretary of Transportation public release process prior to transmission to grantees. Form DOT F 4220.41 shall be used to provide required grant award information to the Assistant Secretary for Governmental Affairs, I-1.

c. Open Government Legislation.

(1) Pursuant to the Freedom of Information Act (FOIA) of 1974 (5 U.S.C. 552), FAA will provide agency records, with certain exceptions, if the request is in writing and identified as an FOIA request, and if the records sought are described with sufficient specificity to permit identification. The requester must also agree to pay fees that are chargeable under DOT and FAA regulations.

(2) Detailed procedures are contained in 49 CFR Part 7 and 14 CFR Part 191.

(3) Pursuant to the FOIA, FAA may be required to release to the public information, correspondence, and documents received from grantees, with limited exceptions.

d. Release of Project Reports.

(1) Policy is that the results of FAA-funded research be made publicly available through appropriate dissemination channels. In implementing this policy, FAA encourages grantees to arrange for access to research results through referred dissemination channels. These include referred journals; edited books, monographs and other publications; and national data banks operated by Government agencies and private organizations.

(2) Project reports normally will be made available to others on request. In recognition of the author's interest to be the first to publish the results of his or her research, FAA will normally honor requests to delay release of these reports.

(3) Sometimes normal channels are unable to provide for adequate dissemination of project reports submitted by grantees. For substantive project reports (i.e., those reporting results of new scientific or engineering research, policy research, or applied research), FAA will arrange for dissemination through the National Technical Information Service (NTIS) of the Department of Commerce. The various technical monitors are responsible for ensuring that the appropriate arrangements for dissemination to NTIS are made. FAA may use its own program funds to meet costs associated with dissemination activities, including payment of page charges to journal publishers and processing charges for furnishing reports to NTIS or other information centers.

832.-839. RESERVED.

## SECTION 4. INTERNATIONAL CONSIDERATIONS

### 840. TRAVEL TO FOREIGN COUNTRIES.

a. Definition. In grants to United States organizations, "foreign travel" means travel to, between, or within a country other than the United States, its territories, or Canada. United States territories include Guam, American Samoa, Puerto Rico, the Virgin Islands, Canal Zone, and the Trust Territory of the Pacific Islands. For awards to foreign organizations, "foreign travel" means travel outside the boundaries of the country in which the grantee is located.

b. Prior Approval.

(1) If the proposal contemplates specific foreign travel, FAA approval will be indicated in the travel line item of the grant budget.

(2) If not shown on the travel line of the grant budget, prior FAA approval is required for each separate foreign trip, except travel:

(a) To Canada.

(b) In those instances where unscheduled changes occur in the prior established itinerary of a research vehicle, which in turn requires a change in previously approved foreign trips for the purpose of joining or departing said vehicle.

(3) If it is necessary for Federal employees (technical monitors, program sponsors, etc.) to conduct foreign travel directly related to the grant with which they are involved, approval for such travel must be obtained from the FAA Deputy Administrator. Foreign travel for groups of five or more Federal employees and for Assistant and Associate Administrators must be approved by the Administrator.

c. Use of United States-Flag Air Carriers.

(1) The Comptroller General of the United States, by Decision B-138942 of June 17, 1975, as amended March 31, 1981, provided guidelines for implementation of Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 1517).

(2) Any air transportation to, from, between, or within a country other than the United States of persons or property, the expense of which will be assisted by FAA funding, must be performed by a U.S.-flag air carrier if service provided by such a carrier is "available."

(3) For the purposes of this requirement, U.S.-flag air carrier service is considered "available" even though:

(a) Comparable or a different kind of service can be provided at less cost by a foreign-flag air carrier.

(b) Foreign-flag air carrier service is preferred by, or is more convenient for, FAA or traveler.

(c) Service by a foreign-flag air carrier can be paid for in excess foreign currency.

(4) The following rules apply unless their application would result in the first or last leg of travel from or to the United States being performed by a foreign-flag air carrier:

(a) A U.S.-flag air carrier shall be used to destination or, in the absence of direct or through service, to the farthest interchange point on a usually traveled route.

(b) If a U.S.-flag air carrier does not serve an origin or interchange point, a foreign-flag air carrier shall be used only to the nearest interchange point on a usually traveled route to connect with a U.S.-flag air carrier.

(c) If a U.S.-flag air carrier involuntarily reroutes the traveler via a foreign-flag air carrier, the foreign-flag air carrier may be used notwithstanding the availability of alternative U.S.-flag air carrier service.

d. Use of Foreign-Flag Air Carriers for Travel to and from the United States. Use of a foreign-flag air carrier is permissible if:

(1) The airport abroad is the traveler's origin or destination airport, and use of U.S.-flag air carrier service would extend the time in a travel status by at least 24 hours more than travel by a foreign-flag air carrier.

(2) The airport abroad is an interchange point, and use of U.S.-flag air carrier service would require the traveler to wait 6 hours or more to make connections at that point, or would extend the time in a travel status by at least 6 hours more than travel by a foreign-flag air carrier.

e. Travel Between Points Outside the United States. Use of a foreign-flag air carrier is permissible if travel:

(1) By a foreign-flag air carrier would eliminate two or more aircraft changes en route.

(2) By a U.S.-flag air carrier would extend the time in a travel status by at least 6 hours more than travel by a foreign-flag air carrier.

(3) Is not part of the trip to or from the United States, and use of a U.S.-flag air carrier would extend the time in a travel status by at least 6 hours more than travel by a foreign-flag air carrier.

f. Short Distance Travel. For all short distance travel, regardless of origin and destination, use of a foreign-flag air carrier is permissible if the elapsed travel time on a scheduled flight from origin to destination airport by a foreign-flag air carrier is 3 hours or less and service by a U.S.-flag air carrier would double the travel time.

g. Charter Flights. Because of the risk of catastrophic loss, FAA does not encourage the use of charter flights as a means of mass transportation for groups of scientists nor does it make arrangements for purchase of charter flight airline tickets.

841. PROJECTS IN A FOREIGN COUNTRY.

a. General. Prior to undertaking any projects outside the United States, the grantee shall ensure that any permits or licenses required by the host country or the political subdivision in which the project will be performed have been obtained and that the researcher(s) will abide by the appropriate ordinances of such foreign countries. Records or evidence that such rules have been complied with should be forwarded to the program office prior to the undertaking of the research. FAA funds may not be used in support of a project that is prohibited by law in the country in which it is undertaken. The program office should be notified in advance of arrangements for the distribution of data, reports, and specimens, as well as arrangements for the participation of foreign scientists.

b. FAA-Supported Activities in Greenland. All scientific research in Greenland must be approved in advance by the Danish Government. Applications for projects in which U.S. citizens and U.S. nationals are involved in any way (logistical, operational, and/or financial support) shall be submitted to the Danish Government through diplomatic channels (i.e., through the U.S. Department of State and the American Embassy, Copenhagen) to the Danish Ministry of Foreign Affairs. Application forms, deadline dates, and instructions are available from the Office of Research and Technology Applications.

842. PASSPORTS AND VISAS. FAA assumes no responsibility for securing passports or visas required by any person because of participation in an FAA-supported project. It should be noted that some countries that normally do not require visas for tourists do require special visas for scientists engaged in research or studies.

843. FUNDING LIMITATIONS OF INTERNATIONAL TRAVEL GRANTS . Funds for international travel grants will normally not exceed the cost of a round-trip, economy class airline ticket between the approved points of origin and destination. Group travel grants awarded to a university, professional society, or other non-profit institution to enable it to coordinate U.S. participation in one or more scientific meetings held abroad may include a flat rate of $50 per traveler for the general administration of this type of project. FAA international travel awards may not be supplemented by funds from any other grant.

844.-849. RESERVED.

## SECTION 5. INTELLECTUAL PROPERTY

850. DEFINITION. Intellectual Property refers to any product of the human intellect, such as an idea, invention, expression, business methods, industrial process, chemical process, etc., that has some value in the marketplace. Rights and protection for owners of intellectual property are based on Federal patent, trademark, and copyright laws and State trade secret laws.

851. PATENTS AND INVENTIONS.

a. Background. Effective July 1, 1981, Section 6 of Public Law 96-517 (December 12, 1980), popularly known as the Bayh-Dole Act (35 U.S.C. 200 et seq.), governs the disposition of rights in inventions in the performance of funding agreements that relate to performance of scientific and engineering research with domestic small business firms and non-profit organizations, including educational institutions. Sections 202-204 of that Act gave these organizations a first right of refusal to title in inventions made by them in performance of Government grants and contracts subject to some limited exceptions.

b. OMB Circular No. A-124, Patents - Small Business Firms and Non-profit Organizations, February 10, 1982, effective March 1, 1982 (47 CFR 7556, February 2, 1982), provided guidance and a model patent clause for Federal agencies in implementing Public Law 96-517. Taking the same approach as that taken by the National Science Foundation in its Grants Program, FAA duplicates the clause contained in the OMB Circular except that:

(1) FAA tailored the clause to apply to grants and to identify FAA.

(2) FAA added the stipulation it may require the grantee to transfer to a foreign government or research performer such rights in any subject invention as are contemplated in an applicable international treaty or agreement.

(3) FAA added the requirement that grantees provide confirmations of the Government licenses for and copies of any U.S. patents on subject inventions.

c. On February 18, 1983, the President issued a memorandum entitled "Government Patent Policy" that directed all Federal agencies to apply the policies of the Bayh-Dole Act and procedures of OMB Circular A-124 to all awardees, except where otherwise required by statute.

d. FAA has adopted this patent policy in its Standard Patent Clause.

e. OMB Circular A-124 requires "flow-down" (patent) provisions in appropriate contractual agreements under grants. The Standard Patent Rights Clause (figure 8-1) requires that a patent rights clause be included in all subcontracts for experimental, developmental, or research work.

f. Patent Policy.

(1) As required by the Bayh-Dole Act and the Presidential memorandum on "Government Patent Policy," FAA will use the patent rights clause prescribed by the Office of Management and Budget in all its funding agreements for the performance of experimental, developmental, or research work. This includes contracts for the operation of Government-owned research facilities, unless FAA determines that some other provision would better serve the purposes of that Act or the interests of the United States and the general public.

(2) In funding agreements covered by a treaty or agreement that provides that an international organization or foreign government, research institute, or inventor will own or share patent rights, FAA will acquire such patent rights as are necessary to comply with the applicable treaty or agreement.

(3) FAA will claim no rights to inventions in funding agreements made primarily for the support of education or training, such as fellowships and traineeships. A disclaimer of interest in inventions will be included in such awards.

(4) If an awardee elects not to retain rights to an invention, and if FAA determines that it has no interest in acquiring title to the invention, FAA will allow the inventor to retain the principal patent rights unless the awardee shows that it would be harmed by that action.

(5) FAA may waive the restrictions imposed by Bayh-Dole act on the assignment or exclusive licensing of FAA-supported inventions by a non-profit organization when that appears to serve the policy and objective of the Act. For identified inventions, FAA may waive the restrictions if the non-profit organization obtains from the prospective assignee or licensee a firm commitment to develop and commercialize the invention. In any industry-university joint research award, FAA may waive the restrictions at the time of award if the non-profit organization shows that these restrictions are unfair considering the industrial participant's contribution or that the project will not be undertaken unless they are waived.

(6) In funding agreements not controlled by the Bayh-Dole Act, FAA may waive any of the rights or conditions normally reserved or imposed if the grantee or contractor demonstrates:

(a) That the interests of the United States and the general public will be better served thereby.

(b) That it is making a substantial contribution of funds, facilities, or equipment to the work performed under the funding agreement.

(7) As far as practical, FAA will apply the intent of this policy to funding agreements entered into before the effective dates of the Bayh-Dole Act and the Presidential memorandum.

g. Standard Patent Rights Clause. The patent rights clause contained in figure 8-1 will be used in every grant and cooperative agreement awarded by FAA that relates to scientific or engineering research unless a special patent clause has been negotiated. Such special patent rights clause may be negotiated with other than non-profit organizations.

FIGURE 8-1. STANDARD PATENT RIGHTS CLAUSE

1. DEFINITIONS.

a. "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code.

b. "Subject invention" means any invention of the grantee conceived or first actually reduced to practice in the performance of work under this grant.

c. "Practical application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

d. "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.

e. "Small business firm" means a small business concern as defined at section 2 of Public Law 85-536 (15 U.S.C. 632), "Small Business Act," and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standard for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.

f. "Non-profit organization" means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any non-profit scientific or educational organization qualified under a State non-profit organization statute.

2. ALLOCATION OF PRINCIPAL RIGHTS. The grantee may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the grantee retains title, the Federal Government shall have a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world. If the award indicates it is subject to an identified international agreement or treaty, FAA also has the right to direct the grantee to convey to any foreign participant such patent rights to subject inventions as are required to comply with that agreement or treaty.

3. INVENTION DISCLOSURE, ELECTION OF TITLE, AND FILING OF PATENT APPLICATIONS BY GRANTEE.

a. The grantee will disclose each subject invention to FAA within 2 months after the inventor discloses it in writing to grantee personnel responsible for the administration of patent matters. The disclosure to FAA shall be in the form of a written report and shall identify the grant under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding of the nature, purpose, operation, and, to the extent known, the physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use, of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to FAA, the grantee will promptly notify FAA of the acceptance of any manuscript describing the invention for publication or of any on sale for public use planned by the grantee.

b. The grantee will elect in writing whether or not to retain title to any such invention by notifying FAA within 12 months of disclosure to the grantee. In any case where publication, on sale or public use, has initiated the 1 year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by FAA to a date that is no more than 60 days prior to the end of the statutory period.

c. The grantee will file its initial patent application on an elected invention within 2 years after election or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale or public use. The grantee will file patent applications in additional countries within either 10 months of the corresponding initial patent application or 6 months from the date when permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications when such filing has been prohibited by a secrecy order.

d. Requests for extension of the time for disclosure to FAA, election, and filing may, at the discretion of FAA, be granted.

4. CONDITIONS WHEN THE GOVERNMENT MAY OBTAIN TITLE.

a. The grantee will convey to FAA, upon written request, title to any subject invention:

(1) if the grantee fails to disclose or elect the subject invention within the times specified in paragraph 3c. above, or elects not to retain title.

(2) in those countries in which the grantee fails to file patent applications within the times specified in paragraph 3c. above; provided, however, that if the grantee has filed a patent application in a country after the times specified in paragraph 3c. above, but prior to its receipt of the written request of FAA, the grantee shall continue to retain title in that country.

(3) in any country in which the grantee decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

5. MINIMUM RIGHTS TO GRANTEE.

a. The grantee will retain a non-exclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title except if the grantee fails to disclose the subject invention within the times specified in paragraph 3c. above. The grantee's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the grantee is a party and includes the right to grant sublicenses of the same scope to the extent the grantee was legally obligated to do so at the time the grant was awarded. The license is transferable only with the approval of FAA except when transferred to the successor of that part of the grantee's business to which the invention pertains.

b. The grantee's domestic license may be revoked or modified by FAA to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in the Federal Property Management Regulations. This license will not be revoked in that field of use or the geographical areas in which the grantee has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of FAA to the extent the grantee, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

c. Before revocation or modification of the license, FAA will furnish the grantee a written notice of its intention to revoke or modify the license, and the grantee will be allowed 30 days (or such other time as may be authorized by FAA for good cause shown by the grantee) after the notice to show cause why the license should not be revoked or modified. The grantee has the right to appeal, in accordance with applicable regulations in the Federal Property Management Regulations concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

6. GRANTEE ACTION TO PROTECT GOVERNMENT'S INTEREST.

a. The grantee agrees to execute or to have executed and promptly deliver to FAA all instruments necessary to:

(1) establish or confirm the rights the Government has throughout the world in those subject inventions for which the grantee retains title, and

(2) convey title to FAA when requested under paragraph 3d. above, and to enable the Government to obtain patent protection throughout the world in that subject invention.

b. The grantee agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the grantee each subject invention made under this grant in order that the grantee can comply with the disclosure provisions to execute all papers necessary to file patent applications on subject inventions, and to establish the Government's rights in the subject inventions. The grantee shall instruct such employees through the employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

c. The grantee will notify FAA of any decision not to continue prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.

d. The grantee agrees to include, within the specification of the United States patent application and any patent issuing thereon covering a subject invention, the following statement:

> "This invention was made with Government support under (identify the grant) awarded by the Federal Aviation Administration. The Government has certain rights in this invention."

e. The grantee or its representative will complete, execute, and forward to FAA a confirmation of a license to the United States Government within 2 months of filing any domestic or foreign patent application.

f. The grantee or its representative will forward to FAA a copy of any United States patent covering a subject invention within 2 months after it is issued.

7. SUBCONTRACTS.

a. The grantee will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work. The subcontractor will retain all rights provided for the grantee in this clause, and the grantee will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

b. In the case of subcontracts, at any tier, when the prime award by FAA was a contract (but not a grant or cooperative agreement), FAA, subcontractor, and contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and FAA with respect to those matters covered by this clause.

8. REPORTING ON UTILIZATION OF SUBJECT INVENTIONS. The grantee agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the grantee or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the grantee, and such other data and information as FAA may reasonably

require. The grantee also agrees to provide additional reports in connection with any march-in proceedings undertaken by FAA in accordance with paragraph j. of this clause. To the extent data or information supplied under this section is considered by the grantee, its licensee, or assignee to be privileged and confidential and is so marked, FAA agrees that, to the extent permitted by 35 U.S.C. 202(c)(5), it will not disclose such information to persons outside the Government.

9. PREFERENCE FOR UNITED STATES INDUSTRY. Notwithstanding any other provision of this clause, the grantee agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by FAA upon a showing by the grantee or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

10. MARCH-IN-RIGHTS. The grantee agrees that, with respect to any subject invention in which it has acquired title, FAA has the right in accordance with procedures in OMB Circular A-124 to require the grantee, an assignee, or exclusive licensee of a subject invention to grant a non-exclusive, partially exclusive, or exclusive license in any field-of-use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the grantee, assignee, or exclusive licensee refuses such a request, FAA has the right to grant such a license itself if FAA determines that:

a. Such action is necessary because the grantee or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field-of-use.

b. Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the grantee, assignee, or their licensees.

c. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the grantee, assignee, or licensee; or

11. SPECIAL PROVISIONS FOR GRANTS WITH NON-PROFIT ORGANIZATIONS. If the grantee is a non-profit organization, it agrees that:

a. Rights to a subject invention in the United States may not be assigned without the approval of FAA, except where such assignment is made to an organization which has as one of its primary functions the management of inventions and which is not, itself, engaged in or does not hold a substantial interest in other organizations engaged in the manufacture or sale of products or the use of processes that might utilize the invention or be in competition with embodiments of the invention (provided that such assignee will be subject to the same provisions as the grantee).

b. The grantee may not grant exclusive licenses under United States patents or patent applications in subject inventions to persons other than small business firms for a period in excess of the earlier of:

(1) Five years from first commercial sale or use of the invention, or

(2) Eight years from the date of the exclusive license excepting that time before regulatory agencies necessary to obtain premarket clearance, unless on a case-by-case basis FAA approves a longer exclusive license. If exclusive field-of-use licenses are granted, commercial sale or use in one field-of-use will not be deemed commercial sale or use as to other fields-of-use, and a first commercial sale or use with respect to a product of the invention will not be deemed to end the exclusive period to different subsequent products covered by the invention.

(3) The grantee will share royalties collected on a subject invention with the inventor; and

(4) The balance of any royalties or income earned by the grantee with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific research or education.

12. COMMUNICATIONS. All disclosures, elections, confirmations of the government license, copies of patents, and other routine communications should be sent to the Office of Research and Technology Applications.

(END OF CLAUSE)

852. COPYRIGHT.

a. Rights to Copyrightable Material. The following principles governing the treatment of copyrightable material produced under grants will apply:

(1) FAA normally will acquire only such rights to copyrightable material as are needed to achieve its purposes or to comply with the requirements of any applicable governmentwide policy or international agreement.

(2) To preserve incentives for private dissemination and development, FAA normally will not restrict or take any part of income earned from copyrightable material except as necessary to comply with the requirements of any applicable governmentwide policy or international agreement.

(3) In exceptional circumstances, FAA may restrict or eliminate an awardee's control of FAA-supported copyrightable material and of income earned from it, if FAA determines that this would best serve the purposes of a particular program or award.

b. Standard Copyrightable Material Clause. The copyrightable material clause contained in figure 8-2 will be used in every grant and cooperative agreement awarded by FAA that relates to scientific or engineering research unless a special copyrightable material clause has been negotiated.

FIGURE 8-2. STANDARD COPYRIGHTABLE MATERIAL CLAUSE

1. "SUBJECT WRITING" includes such items as reports, books, journal articles, software, sound recordings, video tapes, and video discs and means ANY MATERIAL THAT:

a. Is or may be copyrightable under Title 17 of the United States Code, and

b. Is produced by the grantee or its employees in the performance of work under this grant.

2. COPYRIGHT OWNERSHIP, GOVERNMENT LICENSE. Except as otherwise specified in the grant or by this paragraph, the grantee may own or permit others to own copyright in all subject writings. The grantee agrees that if it or anyone else does own copyright in a subject writing, the Federal Government will have a non-exclusive, non-transferable, irrevocable, royalty-free license to exercise or have exercised for or on behalf of the United States throughout the world all the exclusive rights provided by copyright. Such license, however, will not include the right to sell copies or phonorecords of the copyrighted works to the public.

3. GRANTS AFFECTED BY INTERNATIONAL AGREEMENTS. If the award indicates it is subject to an identified international agreement or treaty, FAA can direct the grantee to convey to any foreign participant or otherwise dispose of such rights to subject writings as are required to comply with that agreement or treaty.

4. GRANTEE ACTION TO PROTECT GOVERNMENT INTERESTS. The grantee agrees to acquire, through written agreement or an employee relationship, the ability to comply with the requirements of the preceding paragraphs and, in particular, to acquire the ability to convey rights in a subject writing to a foreign participant if directed by FAA under the previous paragraph. The grantee further agrees that any transfer of copyright or any other rights to a subject writing, by it or anyone whom it has allowed to own such rights, will be made subject to the requirements of this article.

(END OF CLAUSE)

853. SPECIAL PATENT AND COPYRIGHT SITUATIONS. The standard patent rights clause or standard copyrightable material clause need not be applicable or will normally be modified in the following situations:

a. Special Patent Provisions. At the request of the prospective awardee or on recommendation from FAA Chief Counsel, or designee, with the concurrence of the cognizant program office and Grants Officer, special patent provisions may be negotiated based on any of the following:

(1) When the FAA Chief Counsel, or designee, determines that restriction or elimination of the right of a prospective awardee to retain title to any subject invention will better promote the policy and objectives of Chapter 38 of Title 35 of the U.S.C. or the Federal Aviation Act, or any of the Acts that authorized the creation of the Grants Program.

(2) When a prospective awardee that is not a small business firm or domestic non-profit organization shows that any of the rights or conditions normally reserved or imposed by the clause in figure 8-2 should be waived because:

(a) The interests of the United States and the general public will be better served thereby as, for example, where the prospective awardee is uniquely or highly qualified but cannot or will not accept the standard patent rights clause; or

(b) The prospective awardee is making a substantial contribution of funds, facilities, or equipment to the work performed under the award.

(3) When research is to be performed outside the United States.

(4) When other exceptional circumstances exist.

b. Special Copyright Provisions. FAA standard copyrightable material clause need not be applicable or will normally be modified for awards not expected to involve subject writings (such as travel or equipment grants). If such awards are made under an international cooperative agreement, however, some provision may be required.

c. Awards Affected by International Agreements. Many of the bilateral and multilateral agreements and treaties underlying FAA's international cooperative research programs contain provisions governing the allocation of rights to copyrightable material or allocation of patent rights.

(1) These sometimes require an allocation of rights different from that provided by the standard copyrightable material clause or the standard patent rights clause. The standard clauses will be modified in these cases by:

(a) Identification of the applicable agreement or treaty.

(b) Inclusion of the following statement in the award letter: "This project is supported under the cooperative science program listed below. Your rights in inventions, writings, and data may be affected."

(2) After an invention is disclosed to the technical monitor, the recipient of an award subject to an international agreement will be informed as to what rights, if any, it must transfer to foreign participants. Recipients may also ask the technical monitor to provide them with copies of the identified international agreements before or after accepting an award.

854. RIGHTS IN DATA BANKS AND SOFTWARE.

a. Background. Some of the grants support the accumulation of a large body of machine readable data by any of a number of means including literature search, consolidation of existing material, and original creation or collection. Accumulation of such a data bank may itself be a principal purpose of the grant or the data bank may be expected to be so large and comprehensive that it would probably be useful to others for other purposes. A relatively few of the grants may support projects that produce software as a major end product, such as methodologies for processing data, general purpose programs, and course materials, which can readily be adapted to other computers.

b. Availability. Unless otherwise provided in the grant letter, data banks (including machine-readable data) and software, produced with the assistance of the grants will be treated in accordance with standard copyrightable material clause. Consistent with the policy stated in paragraph 860a, FAA encourages and, in some cases, may require that such materials be distributed or made available. Where a special distribution arrangement is required, it will be made part of the award instrument.

855.-859. RESERVED.

## SECTION 6. PUBLICATION/DISTRIBUTION OF GRANT MATERIALS

### 860. PUBLICATION.

a. Policy. It is policy to encourage and, in some cases, require publication and distribution of the results of research conducted under grants. Generally, publication occurs in scientific journals or other news media particularly addressed to the scientific community. Page charges for publication of scientific results in scientific journals may be budgeted as a necessary part of research costs under the grants.

b. Grantee Responsibilities. The preparation, content, editing, and publication of manuscripts are the responsibilities of the principal investigator, consistent with such policies and procedures as the grantee may prescribe. FAA does not review manuscripts prior to submission for publication. Upon publication, a minimum of two copies of reprints will be furnished to the program office.

c. Civil Aviation Security Publications.

(1) All research results related to civil aviation security must be reviewed by the Associate Administrator for Civil Aviation Security, ACS-1, or designee, prior to publication or release to the general public. This includes such items as dissertations, theses, archival and conference technical papers, technical reports, etc. This requirement is to determine if the results contain information that may assist terrorists in undermining established security systems.

(2) Information must be submitted to the grant technical monitor, who then forwards information to the Associate Administrator for Civil Aviation Security, ACS-1, through his or her respective appropriate management official.

(3) Within 2 weeks of submission, a notice of approval or declination for publication or release, or a request for a revision, will be provided by the Associate Administrator for Civil Aviation Security, ACS-1, to the grant technical monitor through his or her respective service director.

d. Acknowledgment and Disclaimer.

(1) All subject writings published or distributed must contain the following acknowledgment:

"This material is based upon work supported by the Federal Aviation Administration under Grant Number (grantee enters grant number)."

(2) All subject writings, except scientific articles or papers published in scientific, technical, or professional journals, must also contain the following disclaimer:

"Any opinions, findings, conclusions, or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Federal Aviation Administration."

### 861.-869. RESERVED.

## SECTION 7. ACQUISITION AND CONTROL OF MATERIALS AND SUPPLIES

870. TITLE TO MATERIALS AND SUPPLIES. Title to materials developed and equipment and supplies purchased under the grant will vest in the grantee institution unless a prior agreement has been made in writing that title will rest in FAA.

871.-879. RESERVED.

## SECTION 8. MISCELLANEOUS

880. LIABILITIES AND LOSSES. FAA assumes no liability with respect to accidents, bodily injury, illness, breach of contract, or any other damages or loss, or with respect to any claims arising out of any activities undertaken with the financial support of a grant, whether with respect to persons or property of the grantee or third parties. The grantee is advised to ensure or otherwise protect itself or others as it may deem desirable.

881. TAX STATUS. Determination of the tax status of an organization or person receiving compensation in any form as a result of a grant is the responsibility of the Internal Revenue Service, State and local tax authorities, and the courts.

882. NATIONAL SECURITY.

a. Classifiable Results Originating Under Grants.

(1) FAA does have original classification authority. However, FAA does not expect that results of FAA-supported research projects will be classifiable, except in very rare instances.

(2) Executive Order 12356 (47 CFR 14874; 1982) states that basic scientific research information not clearly related to the national security may not be classified. Nevertheless, some information concerning, among other things, scientific, technological, or economic matters relating to the national security or cryptology may require classification.

(3) There may, therefore, be cases when the grantee originates information during the course of an FAA-supported project that the grantee believes requires classification under Executive Order 12356.

(4) In such a case, the grantee has the responsibility promptly to:

(a) Submit the information directly to FAA.

(b) Protect the information as though it were classified until the grantee is informed that the information does not require classification, but not longer than 30 days after receipt by FAA.

(c) Notify the appropriate technical monitor.

(5) Executive Order 12356 requires the agency with appropriate subject matter interest and classification authority to decide within 30 days whether to classify the material. If it determines the information requires classification, the grantee shall cooperate with that agency, FAA, or other appropriate agencies in securing all related project notes, papers, and other materials.

(6) If the information is determined to require classification, the performing organization may wish or need to discontinue the project.

b. Non-classifiable Results Originating Under Aviation Security Research. Aviation security research may lead to results that, while not classifiable, may be declared protected and withheld from general public distribution. This authority is set forth in Title 14 C.F.R. Part 191, which "governs the release of any record, and any information contained therein, in the possession of FAA, which has been obtained or developed in the conduct of research and development activities to develop or modify procedures, facilities, and devices to protect persons and property aboard aircraft in air transportation against acts of criminal violence and aircraft piracy."

883. ENVIRONMENTAL IMPACT.

a. The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4332) requires that Federal agencies add environmental considerations to those criteria that are traditionally used to decide on:

(1) New (proposed) actions to be taken.

(2) The continued funding of ongoing actions.

b. If a proposed project might have an environmental impact, the proposal should furnish sufficient information to assist FAA officials in assessing the environmental consequences of supporting the project. FAA will determine:

(1) The adequacy of the information submitted.

(2) Whether or not additional information is needed.

(3) Whether or not an environmental statement will be necessary.

884.-899. RESERVED.

# APPENDIX 1. PUBLIC LAWS, EXECUTIVE ORDERS, AND OTHER DIRECTIVES

The following is a list of various public laws, executive orders, and other directives that are applicable to research grants.

| Number | Short Title |
|---|---|
| **Public Laws** | |
| P.L.85-800 | Copeland "Anti-Kick Back Act" (18 U.S.C.874, 40 U.S.C.276c) |
| P.L.86-624 & P.L.88-349 | Davis-Bacon Act (40 U.S.C.276a) |
| P.L.87-581 | Contract Work Hours and Safety Standards Act of 1962 (40 U.S.C.327-330) |
| P.L.88-352 | Civil Rights Act of 1964, Title VI (42 U.S.C. 2000d) |
| P.L.89-544 | Laboratory Animal Welfare Act of 1966, as amended by the Animal Welfare Act of 1970 (7 U.S.C.2131 et seq.) |
| P.L.89-665 U.S.C.470) | National Historic Preservation Act of 1966 (16 |
| P.L.89-754 Section 204 | Demonstration Cities and Metropolitan Development Act of 1966 (42 U.S.C.3334) |
| P.L.90-577 | Intergovernmental Cooperation Act of 1968 (43 U.S.C.4201 et seq.) |
| P.L.90-620 | Federal Reports Act (44 U.S.C. 3501-3511) |
| P.L.91-190 | National Environmental Policy Act of 1969, Section 102 (42 U.S.C.4332) |
| P.L.91-604 | Clean Air Act of 1970, Section 306 (42 U.S.C.7401) |

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|---|---|
| P.L.92-318 | Education Amendments of 1972, Title IX (20 U.S.C.1681-1686) |
| P.L.92-500 | Federal Water Pollution Control Act of 1972, Section 508 (33 U.S.C.1368 et seq.) |
| P.L.92-522 | Marine Mammal Protection Act of 1972 (16 U.S.C.1361) |
| P.L.93-112 | Rehabilitation Act of 1973, Section 504 (29 U.S.C.794) |
| P.L.93-234 | Flood Disaster Protection Act of 1973 (42 U.S.C.4001 et seq.) |
| P.L.93-502 | Freedom of Information Act of 1974 (5 U.S.C.552) |
| P.L.93-623 | International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C.1517) (See also Comptroller General Decision B-138942 of 3/1/81) |
| P.L.95-220 | Federal Program Information Act & P.L.98-169 Clean Air Act of 1970 (42 U.S.C.1857 et seq)and Pollution Control Act (33 U.S.C.1251) as amended, Section 508, Clean Water Act (33 U.S.C.1368) |
| P.L.95-224 | Grant & Cooperative Agreement Act of 1977 (41 U.S.C.501) |
| P.L.96-511 | Paperwork Reduction Act of 1980 (44 U.S.C.3504(f)) |
| P.L.96-517 U.S.C. 200 | Bayh-Dole Act (Patent & Trademark Amendments of 1980) (35 et seq) |
| P.L.101-121 | Department of the Interior and Related Agencies Appropriation Act of 1990 (31 U.S.C.1352) |
| P.L.101-508 | Federal Aviation Administration Research, Engineering, and Development uthorization Act of 1990 |
| P.L.10' 504 | Aviation Security Improvement Act of 1990 |

**Executive Orders**

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| 11246 | Non-discrimination in Employment by Government Contractors and Subcontractors (Construction) (30 CFR 123.19; amended 32 CFR 14303) |
| 11246 | Equal Employment Opportunity (amended 11375) |
| 11247 | Civil Rights |
| 11288 | Water Pollution Prevention and Abatement |
| 11296 | Evaluation of Flood Hazards |
| 11375 | Equal Employment Opportunity (2 CFR 1971-1975) |
| 11738 | Clean Air Act and Water Pollution Control Act (38 CFR 25161) |
| 11764 | Non-discrimination in Federally Assisted Programs |
| 12356 | National Security Information |
| 12372 | Intergovernmental Review of Federal Programs |
| 12549 | Debarment and Suspension |
| 12591 | Technology Transfer |
| 12677 | Historically Black Colleges and Universities |
| 12731 | Principles of Ethical Conduct for Government Officials and Employees |

**Office of Management and Budget Circulars**

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| A-21 | Cost Principles for Educational Institutions |
| A-40 | Management of Federal Reporting Requirements |
| A-62 | Policies and Procedures for the Coordination of Federal Meteorological Services |

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| A-73 | Audit of Federal Operations and Programs |
| A-87 | Cost Principles for State and Local Governments |
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| A-89 | Federal Domestic Assistance Program Information (Catalog of Federal Domestic Assistance |
| A-102 | Uniform Administrative Requirements for Grants-in-Aid to State and Local Governments (49 CFR, Part 18) |
| A-110 | Uniform Administrative Requirements for Grants and Other Agreements to Non-Profit Organizations |
| A-122 | Cost Principles for Non-profit Organizations |
| A-124 | Patents-Small Business Firms and Non-profit Organizations (ref. Presidential Memorandum on Government Patent Policy to the Heads of Executive Departments and Agencies dated February 18, 1983) |
| A-133 | Audits of Institutions of Higher Learning and Other Non-Profit Institutions |

**Federal Regulations**

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| 5 CFR, Part 2635 | Standards of Ethical Conduct for Employees of the Executive Branch |
| 34 CFR, Part 85 | Drug Free Workplace Act of 1988 |
| 37 CFR, Part 401 | Right to Inventions |
| 40 CFR, Part 15 | Clean Air (EPA) |
| 41 CFR, Part 60 | Equal Employment Opportunity |
| 48 CFR, Part 27 | Presidential Memorandum on Government Patent Policy to the Heads of Executive Departments and Agencies |
| 49 CFR, Part 18 | Uniform Administrative Requirements or Grants and Cooperative Agreements to State and Local Governments |



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