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APPROVAL OF FACILITY PROJECTS

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PREFACE

Date: July 1, 1966

This Handbook prescribes the policies and procedures for facility management within NASA with respect to the manner in which projects for facility acquisition, design, construction, repair and alteration will be approved unless specifically excepted by the Deputy Administrator. The provisions of this Handbook are effective July 1, 1966, and are applicable to all NASA installations and NASA facility projects at the Jet Propulsion Laboratory.

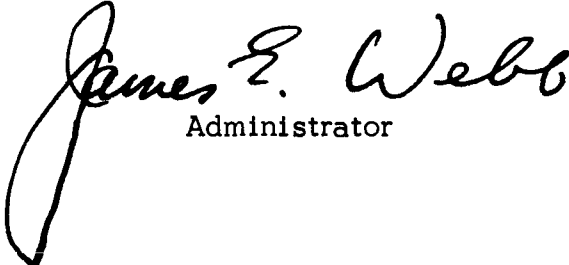
Excluded from the provisions of this Handbook are:

- (a) Research facility grants,
- (b) Facility maintenance and operation functions (those which do not fall within the definition set forth in Appendix A), and
- (c) Equipment which is not a part of a facility project (as defined in Appendix A).

The policies and procedures set forth in this Handbook are issued under the authority of the National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2451 et seq.) and NMI 8810.1A, and supersede:

- (a) NASA Circular 107 (Ref. 3-5), dated October 4, 1960, insofar as it is applicable to facility projects subject to provisions of this Handbook.
- (b) Section V of NPC 107, February 1964 Edition, insofar as it is applicable to facility projects subject to the provisions of this Handbook.
- (c) The Associate Administrator's memorandum to Program Directors, dated November 23, 1964; subject: Guidelines on Construction of Facilities Funding Approval.
- (d) Any other NASA (NACA) instruction or regulation (agency or installation) relating to approval of facility projects which are inconsistent with the provisions of this Handbook.

Questions or comments concerning the contents of this Handbook should be directed to the Office of Programming (Code PA), NASA Headquarters. Additional copies of this Handbook are available from the Administrative Services Division (Code BAP-1), NASA Headquarters.


Administrator

DISTRIBUTION
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CHAPTER 1: INTRODUCTION

100 PURPOSE

This Handbook sets forth policies and procedures for facility management within NASA with respect to the manner in which projects for facility acquisition, design, construction, repair, and alteration (as defined in Appendix A) shall be approved.

101 APPLICABILITY

1. Each facility acquisition, design, construction, repair and/or alteration undertaken by NASA shall be approved in accordance with the provisions of this Handbook unless specific exception is granted by the Deputy Administrator.
2. The provisions of this Handbook are applicable to all NASA installations.

102 EXCEPTIONS

The following are specifically excepted from the provisions of this Handbook:

1. Research facility grants; and
2. Facility maintenance and operation functions which do not fall within the definitions of facility acquisition, design, construction, repair or alteration as contained in Appendix A; and
3. Equipment which is not part of a facility project (as defined in paragraph 14 of Appendix A).

103 DEFINITIONS

For definitions of terms used in this Handbook, see Appendix A.

104 LEGISLATIVE PROVISIONS

1. For various reasons, Federal public works programs in general and the NASA facility programs in particular have been the subject of extensive legislative provisions prescribing the content and conduct of such programs. Certain of these provisions of law having a significant bearing on approval of NASA facility projects are set forth in Appendix B as information relevant to the policies and procedures set forth in this Handbook.
2. Since the provisions of law change from time to time and require professional interpretation and application, NASA installation legal counsel will be consulted to:
 - a. Determine the current state of the law in any given set of circumstances, and
 - b. Establish the legal sufficiency of proposed actions.

CHAPTER 2: POLICY AND AUTHORITY

200 POLICY

It is the policy of the NASA that:

1. Use of funds for execution of facility projects shall be limited to facility projects approved pursuant to the provisions of this Handbook; and the use of such funds shall be authorized by, and subject to, the NASA systems for allocation of resources authority and administrative control of appropriations and apportionments.
2. Facility projects shall not be divided or fragmented in order to circumvent dollar ceilings established by law or by this Handbook.
3. Prior approval of the Deputy Administrator, or an official specifically delegated authority to exercise the approval authority of the Deputy Administrator (and, in some cases, the Administrator) is required for each facility project involving any of the following actions:
 - a. Purchase of land,
 - b. Purchase of any other real property,
 - c. Acquisition of real property by lease,
 - d. Acquisition of any real property by easement or right of way,
 - e. Acquisition of real property by use permit (whether reimbursable by NASA or not),
 - f. Acquisition by transfer of excess real property pursuant to provisions of the Federal Property and Administrative Services Act of 1949 (as amended),
 - g. Acquisition of a facility (or collateral equipment related to a facility) by transfer of accountability or control when such transfer will require the present and/or future use of NASA appropriations for maintenance, repair, and/or operations of the facility so acquired.
 - h. Determination of the total level of effort (or change thereto) for contractual conduct of preliminary design of proposed facilities under the cognizance of each Program or Institutional Director for each fiscal year program,
 - i. Final design of a proposed facility,
 - j. Construction related to or repair or alteration of an existing facility at an estimated cost (including collateral equipment in excess of \$250,000,

- k. Construction of a new facility at an estimated cost (including collateral equipment) in excess of \$100,000 (except when pursuant to Section 1(d) of the annual Authorization Acts - see subparagraph n(1),
 - l. Improvements to non-Federal real property,
 - m. Use of the emergency repairs authority contained in Section 307(b) of the National Aeronautics and Space Act,
 - n. Use of any of the following authorities normally contained in the annual NASA Authorization Acts:
 - (1) Use of "Research and Development" funds for items of a capital nature required for the performance of research and development contracts in each instance involving construction of a major facility estimated to cost (including collateral equipment) in excess of \$250,000 (normally contained in Section 1(d) of the annual Authorization Acts),
 - (2) Reprogramming to meet unusual cost variations (normally contained in Section 2 of the Authorization Acts),
 - (3) Reprogramming to meet urgent changes in program requirements (normally contained in Section 3 of the annual Authorization Acts).
 - o. Use of the fund transfer authority normally contained in the General Provisions of the annual Appropriations Acts, or
 - p. Undertaking of facility projects on behalf of other governmental or nongovernmental organizations on a reimbursement basis.
4. The Economy Act limitations contained in 40 U.S.C. 278(a) (see Appendix B) concerning use of appropriated funds for rent of buildings, and improvement, alteration or repair of such buildings shall be observed in all NASA leases of real property.
5. Only "Construction of Facilities" funds shall be used for any project for acquisition and/or construction of a facility at a NASA installation (see paragraph 24 of Appendix A) if such project:
- a. Involves purchase of land or other real property (or any interest therein);
 - b. Involves acquisition of and/or construction related to an existing facility, and such project is estimated to cost (including collateral equipment) in excess of \$250,000; or
 - c. Involves construction of a new facility, and such project is estimated to cost (including collateral equipment) in excess of \$100,000.

6. Improvements to non-Federal real property shall not be made part of a more comprehensive facility project even though it may otherwise be logical to do so. Projects involving such work shall be identified and presented individually to the Deputy Administrator or other approving official for prior approval. (This policy shall not apply to cases where improvements to non-Federal real property were originally approved by the Deputy Administrator (Associate Administrator) or other approving official and subsequent improvements to that same real property would not otherwise be subject to the prior approval of the Deputy Administrator or other approving official if located on Federal property and NASA legal counsel has concurred in the adequacy of measures taken or to be taken to protect the interest of the United States in such subsequent improvements.)
7. Facility project approval by the Deputy Administrator shall not only convey authorization for project execution, subject to fund approval, but shall also be considered a directive for execution of the project as approved. NASA officials are responsible for notifying, through appropriate channels, the Deputy Administrator of any suspension or deferral of execution of projects approved by the Deputy Administrator.

201 DELEGATION OF AUTHORITY

1. Institutional and Program Directors are delegated authority to approve facility projects for field installations and programs under their respective cognizance, if such facility projects have not been made subject to prior approval by the Deputy Administrator in accordance with paragraph 200-3. The authority so delegated may be redelegated in writing to the Directors of NASA field installations (for this purpose, including the NASA Resident Office--JPL). Copies of all such delegations shall be provided to the Office of Programming (Code PT).
2. The authority of the Deputy Administrator to grant project approval for facility projects involving only actions reserved for his prior approval by paragraph 200-3, subparagraphs c, d, e, f, g and l is delegated to the Assistant Administrator for Industry Affairs, with power of redelegation in writing to other officials within the Office of Industry Affairs.
3. Changes to a facility project previously approved by the Deputy Administrator (Associate Administrator) need not be submitted to the Deputy Administrator for prior approval unless such changes result in a change in scope of the project or alter the nature of the project such that further actions specified in paragraph 200-3 are involved.
4. Changes to a facility project which was previously approved pursuant to the delegation of authority granted by paragraph 200-3 need not be submitted to the Deputy Administrator for prior approval unless such changes alter the nature of the facility project such that an action specified in paragraph 200-3 is involved.

CHAPTER 3: PRINCIPLES OF PROGRAMMING

300 APPLICATION

In order to organize properly those actions and efforts necessary to provide a basis for approval of facility projects, the principles of programming set forth in this Chapter shall be observed.

301 BUDGETING AND FUNDING

Each type of facility project shall be budgeted and funded under an appropriation designated for that type of project as set forth in Appendix C. (Appendix C is intended for use as a guide for action officers only within the context of, and subject to, the policies and procedures set forth in this Handbook. It does not necessarily purport to set forth the full extent of NASA statutory authority. Furthermore, while all of Appendix C is subject to statutory law, some of which changes from year to year, it should be noted particularly that the so-called reprogramming or flexibility provisions of law may be exercised only within specified limits and then, in most cases, only after discretionary and/or ministerial acts by the Deputy Administrator or higher authority.)

302 "TURN-KEY" PROJECT

Each facility project shall be planned and managed (including budgeting, project approval, and funding) by NASA as a "turn-key" project. Consequently, each facility project presented to approval authority within NASA and to external review agencies for authorization and appropriation shall include, as a part of the cost estimate therefor, the estimated cost of any collateral equipment required, and all other reasonably identifiable elements of cost involved in the attainment of an operable facility.

303 "FULL-FUNDING"

Each NASA facility project shall be planned and managed (including budgeting, approval, and funding) on a basis of "full-funding" except that a facility project may be planned and managed on a basis of "phased funding" if:

1. The project has extensive scope and the estimated cost is expected to be in excess of \$20,000,000, and project execution will require two or more years to complete; or
2. The concept or anticipated total scope of the project is indeterminate such that estimation of cost for the total project is impractical.

304 "PHASED FUNDING"

Projects planned and managed on a basis of "phased funding" shall be segmented into distinct work phases which have, to the extent practicable, identifiable beginnings and complete end products. Requests for project approval shall be based on "full-funding" of the particular work phase(s) for which approval is requested. However, a "phased-funding" project must be described and justified in its entirety as an operable and functional entity, to the maximum extent practicable, even though the request for approval relates only to a particular work phase or phases.

305 C of F PROGRAMMING CYCLE

Facility projects to be financed under the "Construction of Facilities" (C of F) appropriation will normally be subject to a four phase programming cycle. The first phase is concerned with the identification of facility requirements and the latter three phases involve the planning and execution of a facility project intended to satisfy such requirements. The four phases are as follows, with the approval to initiate each successive phase based in large measure upon the results of the preceding phase:

1. Conceptual study to establish the nature of the functional requirement, determine feasibility, select alternative concepts, and provide an approximate estimate of cost, for a proposed facility. Such development tests as may be necessary to determine facility design requirements may be conducted as a part of conceptual study. Conceptual study may be undertaken at the discretion of a Program or Institutional Director or a Director of a field installation, and may be conducted by in-house effort, contract, or both. Conceptual study contracts may be funded under either the "Administrative Operations" or the "Research and Development" appropriation; and conceptual study costs normally will not be included in the estimated costs of a C of F project.
2. Preliminary design which involves the analysis of alternative design concepts for the development of a planned project which embodies the most economical and sound engineering method to fulfill a functional requirement; to provide data, including cost estimates, to support budgetary submissions; and to provide a basis for final design and detailed specifications. Preliminary design (unless performed by in-house effort) normally shall be funded from the Facility Planning and Design (Fund Source 8) portion of the "Construction of Facilities" appropriation, and normally should result in a Preliminary Engineering Report (PER) (see NASA Management Manual Instruction 16-1-2).
3. Final design for the development of final working drawings, detailed specifications, and other effort necessary for the preparation of a final bid package. Final design normally shall be funded from the Facility Planning and Design (Fund Source 6) portion of the "Construction of Facilities" appropriation.
4. Project execution which is the actual implementation of the acquisition, construction, repair, or alteration work involved in completion of the project. Project execution shall be funded from the Fund Sources 5 and 7 portions of the "Construction of Facilities" appropriation.

306 RELATIONSHIPS BETWEEN C of F PROGRAMMING AND ANNUAL BUDGET CYCLES

The relationships between the programming cycle for C of F projects and the annual budget formulation and execution cycle shall be as follows:

1. Conceptual study may be undertaken at any time that a facility requirement is identified, either in institutional management or in the course of conducting an R&D program or project.
2. Preliminary design may be undertaken at any time when an Institutional or Program Director concludes, on the basis of completed conceptual study or other evidence, that a C of F facility project will be proposed by such Director for authorization and funding providing that, if preliminary design is to be accomplished by contract, such preliminary design contracts may be financed within the total level of effort approved by the Deputy Administrator for preliminary design for projects under the cognizance of such Director.
3. C of F projects proposed by the Institutional or Program Director in the spring budget preview will be supported by conceptual study or other supporting evidence as a minimum; support of the project proposal by a Preliminary Engineering Report is preferable.
4. Support of a proposed C of F project by a Preliminary Engineering Report is mandatory for inclusion of the proposed project in the detailed NASA budget request in the fall. The need for revision of a Preliminary Engineering Report for a project deferred from an earlier budget request will be determined on the basis of the specific circumstances involved.
5. Approval to execute final design for C of F projects directly supporting approved flight and development projects may be granted by the Deputy Administrator upon completion of the Preliminary Engineering Report and a determination by the Deputy Administrator that such C of F projects will be included in the NASA fall budget request forwarded to the Bureau of the Budget or executed under reprogramming authorities. Approval to execute final design on all other C of F projects may be granted upon determination by the Deputy Administrator that such projects will be included in the President's Budget request. The early approval to execute final design is intended to insure completion of final design to provide a basis for award of construction contracts as soon as possible after appropriation and apportionment of funds for the following fiscal year. Exceptions, to provide for even earlier approval, will be considered on a case by case basis by the Deputy Administrator.
6. Approval for C of F project execution will be granted by the Deputy Administrator after appropriation and apportionment, based on the degree of definition of each project and consistent with the scheduling for dispatch of invitations-to-bid for the construction contracts.

CHAPTER 4: PROCEDURES FOR OBTAINING APPROVAL

400 CONSTRUCTION OF FACILITY PROJECTS

1. Guidance for Planning of Annual C of F Programs

- a. The guidance and instructions for the annual budget formulation process will be provided by the Budget Calls and related instructions.
- b. Budget execution will be guided primarily through the establishment (and revision, as necessary) of a Program Plan for C of F for each fiscal year by the Deputy Administrator and the procedures set forth in this Chapter. The Program Plan will not convey (by itself) an approval of any sort except for planning purposes. At the beginning of each fiscal year, Institutional and Program Directors will be requested to submit their proposed C of F operating plan in the light of Congressional actions and any changes in requirements which have arisen since the determination of the content of the President's Budget for C of F. This submission will be in the form of a "shopping list," including projects for which it is proposed to request preliminary design funds. This submission will provide a basis for the Program Plan. Institutional or Program Directors desiring subsequent change to the Program Plan will submit a memorandum request to the Deputy Administrator via the Office of Programming (Code PT), setting forth the nature of the desired change and the justification therefor.

2. Approval of Facility Planning and Design

- a. As a part of the "shopping list" submission of the proposed C of F operating plan, each project for which preliminary design funds will be requested will be supported by the following information:
 - (1) Name and location of the proposed facility;
 - (2) Description, including an indication of the increased mission capability to be provided by the proposed facility (one paragraph);
 - (3) Justification indicating the nature of the program or project requirement for the proposed facility (one paragraph); and
 - (4) Preliminary estimate of total project funding requirements (including identification of preliminary design and final design funding requirements).

The above information will provide a basis for issuance by the Deputy Administrator of a Project Approval Document (see Figure 1) to each Institutional or Program Director, setting forth the approved level of preliminary design effort (i.e. in dollar terms) for C of F projects under his cognizance. Changes to

this level of effort are subject to the approval of the Deputy Administrator. Resources authority, NASA Form 506 (Green), will be granted as a single line item for preliminary design to each Institutional or Program Director who will issue resources authority, NASA Form 506 (White), in terms of individual projects. The Office of Programming (Code PT) will be contacted for assignment of a project number at that time.

- b. Approval to proceed with final design on each C of F project will be subject to the conditions set forth in paragraph 306-5. The cognizant Institutional or Program Director may obtain final design approval by submitting a memorandum request to the Deputy Administrator via the Office of Programming (Code PT), containing the following information on each project:

- (1) The planned date of award for the design contract(s);
- (2) Estimated final design time;
- (3) Estimated fund requirement for the final design phase;
- (4) Estimated total facility project cost; and
- (5) Any changes in facility description, justification and/or nature of program or project requirement which have occurred during the preliminary design phase.

The Deputy Administrator approval will be issued on a single Project Approval Document to each Institutional or Program Director for final design (see Figure 2) which will identify, by title, each project approved for final design. Resources authority, NASA Form 506 (Green), will be granted as a single line item for final design to each Institutional or Program Director who will issue resources authority, NASA Form 506 (White), in terms of individual projects.

- c. The Office of Programming (Code PT) shall be informed whenever it is proposed to accomplish Preliminary Design or Final Design of a facility project by in-house effort rather than by contractual effort funded from the C of F appropriation.

3. Approval of Project Execution

- a. When a planned project is within the scope and cost authorized by the Congress as indicated by the legislative history of an Authorization Act, the cognizant Institutional or Program Director will submit a memorandum request for project approval, including, as attachments thereto, a Facility Information Sheet (see Figure 3) and a proposed PAD (see Figure 4), to the Deputy Administrator via the Office of Programming (Code PT). Reference to appropriate pages in the budget justification books submitted to the Congress will be adequate to use in the "Purpose" section of the PAD unless there have been changes in the project writeup. In the

latter case, 11 copies of a revised writeup will accompany the request for approval. Signature of a PAD by the Deputy Administrator will constitute project approval.

- b. When a planned project differs from the scope and/or cost of a project previously authorized by the Congress as indicated by the legislative history of an Authorization Act and/or when a planned project has not been presented to the Congress in a previous budget request, the cognizant Institutional or Program Director will submit in addition to the information prescribed in subparagraph a, the following minimum additional information:
- (1) The nature of the problem and the nature and the reason for the change in plan;
 - (2) An explanation and evaluation of alternative solutions to the problem;
 - (3) The justification for the recommended solution, including evaluation of the effect on the NASA program if the request is not approved;
 - (4) The proposed Administrator's determination and a draft Congressional notification letter (when applicable); and
 - (5) The recommended source of the funds required.

Signature of a PAD by the Deputy Administrator will constitute project approval, including certification that the Administrator's determination and Congressional notification (if necessary) have taken place.

- c. When it is proposed to exercise the authority normally contained in Section 2 of the annual Authorization Acts to meet unusual cost variations, the cognizant Institutional or Program Director will submit a memorandum request for such action (including a project writeup) to the Deputy Administrator via the Office of Programming (Code PT), containing the following minimum information:
- (1) The locational line item(s) and fiscal year(s) involved and the amount(s) of increase (or other change) by project(s);
 - (2) The circumstances explaining the necessity for the increase, including identification of any planning factor(s) used in the previous estimate(s) which has been invalidated and the reasons therefor;
 - (3) Evaluation of the effect on the NASA program if the request is not approved; and
 - (4) Recommendation concerning offsetting decreases in other locational line items, including an explanation and evaluation of the effect of such decreases on projects under such other locational line items.

Project approval by the Deputy Administrator will be granted by approval of change to the resources authorization, NASA Form 506 (Green), for the locational line items involved, including notice that the Administrator's approval (if required) has been granted.

- d. When it is proposed to exercise the authority set forth in Section 307(b) of the National Aeronautics and Space Act of 1958 for emergency repairs, the cognizant Institutional or Program Director will submit a proposed PAD to the Deputy Administrator via the Office of Programming (Code PT) together with a memorandum request (including a project writeup) containing the following minimum information:

- (1) The nature of the circumstances requiring emergency repairs, including the facility(ies) involved, the nature and extent of the damage and necessary repairs, and the cause of the damage;
- (2) Evaluation of the effect on the NASA program if the request is not approved, and
- (3) The source of funds for emergency repairs.

Project approval by the Deputy Administrator will be granted by signature of a PAD and approval of related change to resources authorizations, NASA Form 506 (Green), including notice that the approval of the Administrator (if required) has been given.

- e. When projects involve purchase of land or other real property, the project writeup submitted in support of the request for project approval will separately identify the description, justification, and estimated cost of the real property to be purchased.

401 PROJECTS INVOLVING OTHER ACQUISITIONS

1. When other acquisitions of facilities by lease, easement, right-of-way, use permit, transfer of excess real property, transfer of accountability or control, and/or certain improvements to non-Federal real property are involved, the cognizant Institutional or Program Director will submit a memorandum request to the Office of Industry Affairs (Code KM) for project approval.
2. The request will contain all elements of information pertinent to project approval, such as:
 - a. Explanation of the circumstances justifying the requested action as described,
 - b. Explanation and evaluation of alternative courses of action,
 - c. The basis of cost estimates (including any related indirect costs for rehabilitation or modification of the real property to be acquired) and source of funds,

- d. Evaluation of the effect on the NASA program if the request is not approved,
 - e. Certain improvements to non-Federal land: Source of funding; measures taken or to be taken to protect Federal interest in such improvements (particularly necessary if improvements are non-severable); and project writeup (if the estimated cost exceeds \$250,000) or brief description (if the estimated cost is \$250,000 or less),
 - f. Other elements of information to be specified in instructions issued by the Director of Facilities Management, Office of Industry Affairs.
3. Project approval by the Assistant Administrator for Industry Affairs or his delegee (including notice that Bureau of the Budget approval, if required, has been granted) will be furnished by memorandum reply to the cognizant Institutional or Program Director.

402 R&D FUNDS-- CONSTRUCTION OF MAJOR FACILITY--ESTIMATED COST (Including Collateral Equipment) IN EXCESS OF \$250, 000

1. In instances involving proposed use of "Research and Development" funds for the construction of a major facility required for the performance of an R&D contract(s) at an estimated cost (including collateral equipment) in excess of \$250,000, the cognizant Program Director will submit a memorandum request (including a project writeup) for project approval to the Deputy Administrator via the Office of Programming (Code PT). The memorandum request will contain:
 - a. An explanation of the circumstances justifying the requested approval (including the reason(s) for the intervention of time or other considerations which preclude budgeting and funding for the requirement under the "Construction of Facilities" appropriation and which preclude deferral until the next annual authorization and appropriation request, and the relationship of the facility requirement to the "performance of research and development contracts");
 - b. An explanation and evaluation of alternative courses of action; and
 - c. An evaluation of the effect on the NASA program if the request is not approved.Attached to the memorandum request will be a draft Congressional notification letter and a project writeup (including an identification of the source of funding).
2. Approval by the Deputy Administrator (including notice that the requirements for Congressional notification have been satisfied) will be documented by memorandum reply to the cognizant Program Director and by notation on the appropriate Research and Development Project Approval Document to indicate the approval given.

403 OTHER FACILITY PROJECTS SUBJECT TO PRIOR APPROVAL BY THE DEPUTY ADMINISTRATOR

1. When facility projects involve major repairs, major alterations, and/or reimbursable work by NASA for other customers, the cognizant Institutional or Program Director will submit a memorandum request (including a project writeup) to the Deputy Administrator via the Office of Programming (Code PT), for project approval.
2. Each request will include the basic elements of information pertinent to project approval, such as:
 - a. An explanation of the circumstances justifying the requested action as described;
 - b. An explanation and evaluation of alternative courses of action;
 - c. The basis of the cost estimate and source of funds; and
 - d. Evaluation of the effect on the NASA program if the request is not approved.
3. In addition to the information required in subparagraph 2, the following specific information will be included in each instance:
 - a. Major repair
 or
Major alteration } Source of funding ("Administrative Operations", "Research and Development", or "Construction of Facilities" (identify the funding project)); and project writeup.
 - b. Construction to be undertaken on a reimbursable basis: Evidence of a valid reimbursable order (or equivalent) by the customer agency or organization; impact on NASA program, and resources (including manpower) for which reimbursement will not be made; and project writeup (if the estimated cost exceeds \$250,000) or brief description (if the estimated cost is \$250,000 or less).
4. Approval by the Deputy Administrator will be documented by memorandum reply to the cognizant Institutional or Program Director.

404 APPROVAL FOR FACILITY PROJECTS NOT REQUIRING PRIOR APPROVAL BY DEPUTY ADMINISTRATOR

1. Facility projects not requiring the prior approval of the Deputy Administrator will be approved by an official authorized to do so pursuant to the delegation of authority set forth in paragraph 201.
2. One information copy of the approved project writeup will be furnished to the Office of Programming (Code PT) together with a copy of the project approval or of an approved change to a previous project approval promptly upon approval of each project estimated to cost \$25,000 or more.

405 CHANGES TO APPROVED FACILITY PROJECTS

1. Changes of any kind to a facility project previously approved pursuant to the delegation of authority to officials other than the Deputy Administrator may be approved by the same officials providing that such changes would not alter the type of project in such a manner that the actions involved would require approval authority which is not delegated to the official. Changes which would alter the type of project in the latter manner will follow the procedure outlined for submission of the resulting type of project to the Deputy Administrator for his prior approval.
2. A change to a project previously approved by the Deputy Administrator (which does not affect the approved scope of the project) may be approved by officials delegated authority pursuant to paragraph 201. Upon approval of any such change, the approving official will forward information copies of the following documents to the cognizant Program or Institutional Director (who will forward an information copy to the Office of Programming (Code PT)).
 - a. A revised Project Approval Document or other approval document showing (among other information) any changes to funding requirements;
 - b. The approving document signed by the approving official; and
 - c. The request which was approved, which should set forth the nature of, and the justification for, the requested change.

406 STAFF REVIEW COORDINATION

Generally, project approval requests forwarded via either the Office of Programming (Code PT) or the Office of Industry Affairs (Code KM) pursuant to the provisions of this Handbook will be coordinated with the other office prior to presentation to the approving official for action. Coordination with other staff offices will be accomplished as appropriate.

SAMPLE FORMAT
CONSTRUCTION OF FACILITIES
PROJECT APPROVAL DOCUMENT

Type of Effort: Preliminary Design

Fund Source: 8

Authorization Line Item: Facility Planning and Design

Program Year:

Purpose: The levels of effort approved below are for the contractual conduct of preliminary design for facility projects, which may be proposed for budgeting and/or funding for final design and project execution under the "Construction of Facilities" appropriation at a later time, within the cognizance of the indicated Institutional and Program Directors. Preliminary design will be conducted in accordance with the provisions of NASA Management Manual Instruction 16-1-2.

<u>Approved Level of Effort:</u>	<u>Code</u>	<u>Amounts</u>
AA (Manned Space Flight)		\$
AA (Space Science and Applications)		
AA (Advanced Research and Technology)		
AA (Tracking and Data Acquisition)		_____
	Total	\$

Change to the approved levels of effort is subject to the prior approval of the Deputy Administrator. Funding approval will be established through the NASA systems for resources authorizations and allotment of funds.

Approved: _____
 Title : _____
 Date : _____

FIGURE 1

SAMPLE FORMAT
CONSTRUCTION OF FACILITIES
PROJECT APPROVAL DOCUMENT

Type of Effort: Final Design

Fund Source: 6

Authorization Line Item: Facility Planning and Design

Program Year:

Institutional/Program Director:

Purpose: Contractual conduct of final design is approved for the facility projects indicated below, which may be proposed for budgeting and/or funding under the "Construction of Facilities" appropriation at a later time. Final design shall include all efforts necessary for the preparation of a bid package or other similar documentation necessary for initiation of implementation of the project plan immediately after approval for project execution, which will be granted by a separate Project Approval Document.

Projects Approved for Final Design:

<u>Code</u>	<u>Project Title</u>	<u>Location</u>
-------------	----------------------	-----------------

Funding approval will be established through the NASA systems for resources authorizations and allotment of funds.

Approved: _____

Title : _____

Date : _____

FIGURE 2

SAMPLE FORMAT
CONSTRUCTION OF FACILITIES
FACILITY INFORMATION SHEET

FY _____ CofF Program

1. Project Title and Number:

2. Location:

3. Background:

Program Office:

- (1) (Indicate whether facility is new or is addition to existing facility; what new capability or capacity facility will provide; list all buildings or other structures included in facility project and indicate function of each.)
- (2) Identify any changes in description, justification or program relationship that have occurred during design phase.
- (3) If an addition to existing facility indicate prior year funding.

4. Milestones:

Dates

- a. Construction Design Complete
- b. Instrumentation or Equipment Design Complete
- c. Construction Funds Required¹
- d. Instrumentation or Equipment Funds Required¹

5. Contracts:

<u>Amount</u>	<u>Center Invita- or Agent</u>	<u>tion to Bid Date</u>	<u>Award Date (Qtr. FY)</u>	<u>Comple- tion Date (Qtr. FY)</u>	<u>Operation- ally Ready Date (Qtr. FY)</u>
---------------	--	-----------------------------	-------------------------------------	--	---

- a. Construction:
- b. Instrumentation
or Equipment
Contracts:

6. Obligation Plan:

<u>Total Cost²</u>	<u>Current Fiscal Year</u>				<u>Total</u>	<u>FY 196x</u>	<u>FY 196x</u>
	<u>1st Qtr</u>	<u>2d Qtr</u>	<u>3d Qtr</u>	<u>4th Qtr</u>			
xx	xx	xx	xx	xx	xx	xx	xx

¹When the date on which funds are required leads the invitation-to-bid date by more than two months, a brief statement clarifying the condition which dictates this lead time requirement should follow the tabulation of milestone dates.

²When the total cost differs from that presented in the budget request to the Congress, identify the difference by comparison between the present and budget estimates and explain the difference in whatever depth of detail is necessary for understanding.

FIGURE 3

SAMPLE FORMAT
CONSTRUCTION OF FACILITIES
PROJECT APPROVAL DOCUMENT

Project: _____ Code: _____
Authorization Act Line Item: _____ Program Year: _____
Cognizant Program Office: _____ Cognizant Installation: _____
Purpose and Description: _____ Location: _____

Schedule:

Stipulations:

1. (Financial Reporting) { fill in as
2. (Management Reporting) { appropriate
3. Other appropriate stipulations (if any):

Approved: _____ Date: _____
Title: _____ Page: _____

Funding Information (in thousands of dollars) (funding approval is established through the NASA systems for resources authorizations and allotment of funds):

FY _____ FY _____ FY _____ FY _____ Total

(e.g., preliminary design; final design; construction)

This sample format will be used as a general rule. Exceptions may be granted upon application to the Office of Programming (Code PT).

FIGURE 4

DEFINITION OF TERMS

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1. ALTERATION is the modification or modernization of an existing facility which may or may not affect the function, capability, utility, structure, stability, safety, or efficiency of the facility, but does not, for practical purposes, affect its external dimensions. Alteration may involve the removal, relocation or installation of existing or additional interior walls or ceilings, doors, windows, collateral equipment and of utilities. Alteration is divided into "major" and "minor" alteration; see below. It should be distinguished from "construction" (see paragraph 6).
2. ALTERATION, MAJOR is a term used to identify a facility alteration project having an estimated cost (including collateral equipment) in excess of \$250,000; also used to denote a type of project.
3. ALTERATION, MINOR is used to identify a facility alteration project having an estimated cost (including collateral equipment) of \$250,000 or less; or a type of project.
4. CHANGE IN SCOPE (of a facility project) is the result of an action initiated after project approval but before project completion, which increases or decreases or otherwise alters materially the functional capability, the basic design concept or method used to achieve the functional capability, or site plan of the facility which is the subject of the project. Examples are: (a) adding a wing or floor to an office or laboratory building (i.e., adding square footage); (b) adding capability to test a second engine on a test stand originally designed for one engine only; (c) adding test or laboratory equipment to what would otherwise have been an office building (i.e., adding a new function); (d) the converse of any of the foregoing (i.e., deleting space, capability or function); (e) relocating a facility from one geographic location to another (such as from one site to another, or from the main installation to a component installation geographically separate but under the same line item in the annual Authorization Acts); and/or (f) dividing a building approved as one building into two buildings (even though the two have the same function, same site, same square footage, and same cost as the one).
5. COLLATERAL EQUIPMENT is all that non-integral, severable equipment which is acquired for use, or used, in a facility. "Collateral equipment" is not required to make the structure or building useful and operable as a structure or building, but imparts to the facility its particular character at the time, e.g., furniture in an office building, laboratory equipment in a laboratory building, test equipment in a test stand, machine tools in a manufacturing facility, electronic computers in a computer facility, etc. "Collateral equipment" is placed in use in a facility but is not permanently attached thereto except for operating purposes and is removable without significant damage to the real property.
6. CONSTRUCTION is the term used in this Handbook to encompass the action necessary for the erection of, or addition or extension to,

or expansion of a facility, utilizing the skills and trades of the construction industry. Construction is generally accomplished by a construction contract which may also include such activities as site preparation and the establishment of associated roads, parking areas and utility connections.

7. CONSTRUCTION, MAJOR is used to identify a facility construction project related to an existing facility having an estimated cost (including collateral equipment) in excess of \$250,000; or a facility construction project for a new facility having an estimated cost (including collateral equipment) in excess of \$100,000; or a type of project.
8. CONSTRUCTION, MINOR (EXISTING) is used to refer to a facility project involving construction effort related to an existing facility (e.g. an addition, extension, expansion) having an estimated cost (including collateral equipment) of \$250,000 or less; or a type of project.
9. CONSTRUCTION, MINOR (NEW) is used to mean a facility project involving construction effort related to a new facility having an estimated cost (including collateral equipment) of \$100,000 or less; or a type of project.
10. DESIGN is the term used in this Handbook to encompass "preliminary design" and "final design" for facility projects proposed for funding under the "Construction of Facilities" appropriation. Contracts for "Design" are funded through Fund Sources 6 and 8 under the "Construction of Facilities" appropriation.
11. DIRECTOR, INSTITUTIONAL is the title applied to the Associate Administrator for Manned Space Flight, the Associate Administrator for Space Science and Applications, the Associate Administrator for Advanced Research and Technology, and the Assistant Administrator for Industry Affairs in their respective roles as the Headquarters manager of the field installations assigned to them. The Deputy Associate Administrator acts in the same capacity with respect to NASA Headquarters as an "installation".
12. DIRECTOR, PROGRAM is the title applied to the Associate Administrator for Manned Space Flight, the Associate Administrator for Space Science and Applications, the Associate Administrator for Advanced Research and Technology, the Associate Administrator for Tracking and Data Acquisition, and the Assistant Administrator for Technology Utilization in their respective roles as the Director of one or more NASA programs.
13. EASEMENT is an acquired privilege or right of use or enjoyment which one party may have in the land of another. For example, an easement or right-of-way for road or highway purposes, construction and maintenance of utility lines, etc.
14. EQUIPMENT is personal property which meets all of the following criteria: (a) has an estimated service life of one year or more;

(b) has an initial acquisition cost of \$50 or more per unit; (c) retains its identity when put into use; and (d) will not be consumed during an experiment. Equipment which is not a part of a facility project (i.e. neither integral nor collateral equipment) and with which no construction (or so little construction as to be insignificant, i.e. \$50,000 or 5% of total equipment cost, whichever is lesser) is connected is excluded from the provisions of this Handbook.

15. ESTIMATED COST (INCLUDING COLLATERAL EQUIPMENT) (of a facility project) is the calculated amount (as distinguished from an actual outlay) anticipated to be expended for labor, materials and other items of expense required in order to execute a planned facility project in its entirety (including any related land acquisition, planning, design, site preparation, construction, and purchase and installation of collateral equipment). "Estimated cost" will be based on related actual cost experience, prevailing wages and prices or anticipated future conditions. "Estimated cost" should be computed by appropriate combination of engineering estimates, contingency and change order factor, cost-rise factor, and project administrative costs (if to be performed by another agency or organization for NASA). "Estimated cost" covers those costs estimated to be involved in the execution of the facility project as described; therefore, the estimated costs of installing collateral equipment, which was acquired previously (i.e. in a prior fiscal year program), should be included, but the cost of original procurement of such equipment will be excluded. Similarly, the costs of making possible subsequent incorporation of equipment planned for future procurement will be included; but the estimated procurement costs of such equipment will be excluded if such costs cannot reasonably be assigned to a specific project due to uncertainties with respect to the size, cost, final configuration, and ultimate location of such equipment. The term "estimated cost," as used in this Handbook, is not identical with the term "fixed asset cost" used for accounting purposes.
16. FACILITY is the generic term used to encompass real property and related integral and collateral equipment of a capital nature; thus, the term would not encompass operating materials, supplies, and non-capitalized equipment. See NASA Financial Management Manual, paragraph 9250-32a, for criteria for capitalizing costs of NASA-Owned Equipment. The term facility is used in connection with land, buildings (facilities having the basic function to enclose usable space), structures (facilities having the basic function of a research or operational tool or activity), and other real property improvements.
17. FACILITY ACQUISITION is the generic term used to encompass the obtaining by NASA of title to or an interest in, land, buildings, other structures and facilities by purchase, lease, easement, use permit, transfer of accountability, transfer of control, or transfer as excess real property.
18. FACILITY PROJECT is the generic term used to denote the aggregation of specific individual jobs or tasks into a basic building block or unit of work in relation to the acquisition, design, construction, repair,

or alteration of a NASA facility. Hence, usage of the term gives rise to such specific applications as construction project, repair project, etc., which are particular types of facility projects in effect. For types of facility projects, see paragraph 35 of this Appendix, and Appendix C.

19. **FULL-FUNDING** is the practice of budgeting and funding (in a particular fiscal year program) for the total estimated cost of a work unit (such as a project) as distinguished from "phased-funding." (See paragraph 25.)
20. **IMPROVEMENTS TO NON-FEDERAL REAL PROPERTY** is any construction or other activity making a capital improvement to land or other real property which is not owned by the United States (e.g., contractor or state-owned industrial land, state-owned roadways, privately-owned railroads, or land or other real property leased by NASA). The Comptroller General has held that capital improvement includes such things as construction of a building or structure, access roads, bridges and barge locks; installation or erection of fences and utility poles, lines and conduits; and grading and filling. The term "improvements to non-Federal real property," as used in this Handbook, is not identical with the term "leasehold improvements" used in NASA Financial Management Manual, paragraph 9020-4, for fixed asset accounting purposes.
21. **INTEGRAL EQUIPMENT** (or nonseverable equipment) is that equipment which is normally required to make a facility useful and operable as a facility and which is built in or permanently affixed thereto in such a manner that removal would impair the usefulness, safety, or comfort of the facility. Integral equipment includes such items as elevators, transformers and power distribution systems, central air-conditioning systems, electrical and plumbing fixtures and equipment.
22. **LEASE** is an instrument conveying land, buildings, other structures or facilities or portions thereof for a specified term of time, in consideration of payment of a rental fee. The terms of revocation of the instrument are stated in the lease.
23. **LEVEL OF EFFORT** is used to denote the rate of application of resources stated in dollar terms (rather than man-months or other measures of physical resources) related to a large number of individual efforts which are not susceptible to a meaningful individual specification either as to work statement or schedule by a particular level of management, but which bear a common relationship to a broadly stated goal or end-purpose.
24. **NASA INSTALLATION**, as used in paragraph 200-5, means the following installations: NASA Headquarters; Ames Research Center; Electronics Research Center; Flight Research Center; Goddard Space Flight Center; Jet Propulsion Laboratory; Kennedy Space Center, NASA; Langley Research Center; Lewis Research Center (including Plum Brook Station); Manned Spacecraft Center; Marshall Space Flight

Center; Michoud Assembly Facility; Mississippi Test Facility; Nuclear Rocket Development Station; and Wallops Station.

25. PHASED FUNDING is the practice of budgeting and funding (in a particular fiscal year program) the total cost of one or more work phases which comprise less than the total of a facility project, as distinguished from full-funding (see paragraph 19).
26. PROJECT APPROVAL is the approval of the objectives and scope of a proposed project, given by the Deputy Administrator or other official to whom such authority is delegated. Project approval not only conveys authority for project execution (subject to funding approval via the resources authorization and allotment systems) but also constitutes a directive to proceed with project execution. Use of NASA funds is limited to approved projects, but project approval by itself does not convey authority to use funds.
27. PURCHASE is a legally executed transaction by which the United States acquires ownership (fee simple) of real and/or personal property in consideration of payment of a purchase price or other value. Purchase of real property may or may not involve condemnation proceedings.
28. REAL PROPERTY is land, buildings, structures, utilities systems and improvements and appurtenances thereto, permanently annexed to land. Real property includes equipment attached to and made a part of buildings, structures and other facilities, such as heating systems, but excludes collateral equipment (such as machine tools) which is removable without significant damage to the real property. Equipment serving a function of real property (e.g., trailers used to house personnel) is considered as real property when so used.
29. REPAIR is the restoration of property to a condition substantially equivalent to its original or designed capacity and efficiency by replacement, overhaul, or reprocessing of its original constituent parts or materials when such restoration is necessitated by wear or tear, damage, or other failure of the property to perform the required function. Repair excludes replacement of property pursuant to a planned retirement program, and the upkeep of property through recurring, routine, periodic or scheduled maintenance.
30. REPAIR, MAJOR is used to denote a facility repair project having an estimated cost (including collateral equipment) in excess of \$250,000; or a type of project.
31. REPAIR, MINOR is a term used to denote a facility repair project having an estimated cost (including collateral equipment) of \$250,000 or less; or a type of project.
32. RESOURCES AUTHORITY is an authority, conveyed by a NASA Form 506, to utilize specified amounts of resources available to NASA (funds, travel limitation, personnel complement controls) for specified approved projects or activities. Commitment, obligation and/or

expenditure of funds pursuant to an approved NASA Form 506 is subject to the availability of allotment of funds.

33. TURN-KEY PROJECT is a facility project so planned and managed that, upon execution of the project, the user may "turn a key" and enter a fully operable facility in terms of the function and capacity intended for the facility. Thus the planning and management of the turn-key project must take into account all reasonably identifiable elements of cost (including all collateral equipment, roads, parking areas, and utilities) necessary to achieve a fully operable facility for the initial occupant, as well as appropriate allowances for changes and contingencies which arise during construction. For this reason, a turn-key project encompasses all changes in specifications which arise prior to substantial completion of Government acceptance of the facility and which are necessary to accommodate its initial use for the intended function. However, a turn-key project does not necessarily cover requirements for adaptive equipment or equipment spares intended for operational use of the facility subsequent to Government acceptance of the facility.
34. USE PERMIT is a document whereby temporary permission is conferred on NASA to use land, buildings, structures or other facilities for which another government agency has custody and accountability.
35. TYPES OF FACILITY PROJECTS refers to classifications of facility projects according to the nature of the actions involved in such projects. Project types include those indicated in Appendix C.

**CERTAIN PROVISIONS OF LAW HAVING SIGNIFICANT BEARING
ON APPROVAL OF NASA FACILITY PROJECTS**

(Since the provisions of law change from time to time and require professional interpretation and application, NASA legal counsel should be consulted to determine the current state of the law in any given set of circumstances and to establish the legal sufficiency of proposed actions.)

1. National Aeronautics and Space Act of 1958 (as amended):

Acquisition
of Facilities

Section 203(b) "In the performance of its functions the Administration is authorized - . . . (3) to acquire (by purchase, lease, condemnation, or otherwise), construct, improve, repair, operate, and maintain laboratories, research and testing sites and facilities . . ."

Emergency
Repairs

Section 307(b) "Any funds appropriated for the construction of facilities may be used for emergency repairs of existing facilities when such existing facilities are made inoperative by major breakdown, accident, or other circumstances and such repairs are deemed by the Administrator to be of greater urgency than the construction of new facilities."

2. 41 U.S.C. 14:

Authorization
for Land Pur-
chase

"No land shall be purchased on account of the United States, except under a law authorizing such purchase."

3. NASA Authorization Acts (Specific quotations are taken from the FY 1966 NASA Authorization Act; where recent Authorization Acts differed significantly from the FY 1966 Act, notation is made). (Caution: Provisions of the FY 1967 NASA Authorization Act, effective July 1, 1966, and subsequent Authorization Acts may differ from the following provisions):

C of F Appropri-
ation Authori-
zation

Section 1(b) Authorizes appropriations for "Construction of Facilities", including land acquisition, in total and by 13 line items (12 locational line items and Facility Planning and Design not otherwise provided).

(Note: Number and identity of line items under "Construction of Facilities" varies from year to year depending upon program requirements.)

Use of R&D
Funds for Items
of a Capital
Nature and Fa-
cility Grants

Section 1(d) "Appropriations for 'Research and Development' may be used (1) for any items of a capital nature (other than acquisition of land) which may be required for the performance of research and development contracts and (2) for grants to nonprofit organizations whose primary purpose is the conduct of scientific research, for purchase or construction of additional research facilities; and title to such facilities shall be vested in the United States unless the Administrator determines that the national program of aeronautical and space activities will best be served by vesting title in any such grantee institution or organization. Each such grant shall be made under such conditions as the Administrator shall determine to be required to insure that the United States will receive therefrom benefit adequate to justify the making of that grant. None of the funds appropriated for 'Research and development' pursuant to this Act may be used for construction of any major facility, the estimated cost of which, including collateral equipment, exceeds \$250,000, unless the Administrator or his designee has notified the Committee on Science and Astronautics of the House of Representatives and the Committee on Aeronautical and Space Sciences of the Senate of the nature, location, and estimated cost of such facility."

(Note: This section was numbered variously in prior year Authorization Acts. The General Provisions of the FY 1964 Independent Offices Appropriation Act contained a requirement that (1) a period of 30 days must pass after such notice to the House and Senate Committees, or (2) each such committee shall transmit notice to the effect that such committee has no objection, whichever is sooner; this provision was not repeated in the FY 1965 or FY 1966 Appropriation Act. See second note under "Fund Transfer.")

Limitation on
Cost of Minor
Construction
(New Facility)

Section 1(g) "No part of the funds appropriated pursuant to subsection 1(c) [i.e. 'Administrative Operations']* for maintenance, repairs, alterations, and minor construction shall be used for the construction of any new facility the estimated cost of which, including collateral equipment, exceeds \$100,000."

(Note: This subsection was not contained in FY 1963 and prior Acts.)

Flexibility to
Meet Cost
Variations

Section 2 "Authorization is hereby granted whereby any of the amounts prescribed in paragraphs (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), and (12), [paragraph

*Material in [] is editorial insertion for clarification purposes.

(13) - Facility Planning and Design - is excluded] of subsection 1(b) may, in the discretion of the Administrator of the National Aeronautics and Space Administration, be varied upward 5 per centum to meet unusual cost variations, but the total cost of all work authorized under such paragraphs shall not exceed (the total of the amount in paragraphs (1)-(12))."

(Note: Application of this authority has varied year to year, e.g. this authority was applicable to Facility Planning and Design in the FY 1962 and 1963 Acts but not in the FY 1964 or FY 1965 Acts.)

Flexibility to Meet Urgent Changes in Program Requirements

Section 3 "Not to exceed one-half of one per centum of the funds appropriated pursuant to subsection 1(a) hereof [i.e. for 'Research and Development']* may be transferred to the 'Construction of facilities' appropriation, and, when so transferred, together with \$10,000,000 of the funds appropriated pursuant to subsection 1(b) hereof [i.e. for 'Construction of facilities']* (other than funds appropriated pursuant to paragraph (12) [Various Locations]* of such subsection) shall be available for expenditure to construct, expand, or modify laboratories and other installations at any location (including locations specified in subsection 1(b)), if (1) the Administrator determines such action to be necessary because of changes in the national program of aeronautical and space activities or new scientific or engineering developments, and (2) he determines that deferral of such action until the enactment of the next authorization Act would be inconsistent with the interest of the Nation in aeronautical and space activities. The funds so made available may be expended to acquire, construct, convert, rehabilitate, or install permanent or temporary public works, including land acquisition, site preparation, appurtenances, utilities, and equipment. No portion of such sums may be obligated for expenditure or expended to construct, expand, or modify laboratories and other installations unless (A) a period of thirty days has passed after the Administrator or his designee has transmitted to the Committee on Science and Aeronautics of the House of Representatives and to the Committee on Aeronautical and Space Sciences of the Senate a written report containing a full and complete statement concerning (1) the nature of such construction, expansion, or modification, (2) the cost thereof including the cost of any real estate action pertaining thereto, and (3) the reason why such construction, expansion, or modification is necessary in the national interest, or (B) each such committee before the expiration of such

*Material in [] is editorial insertion for clarification purposes.

period has transmitted to the Administrator written notice to the effect that such committee has no objection to the proposed action."

(Note: Applicability of this section has varied from year to year, e.g. the FY 1964 and 1965 language excluded Facility Planning and Design as a source of the \$30,000,000 whereas the FY 1962, 1963 and 1966 language did not. The FY 1966 language excluded Various Locations, which was not excluded in prior years. The per centum and source of funds which may be transferred from other appropriations has also varied from year to year, e.g. 3 per centum of "Salaries and Expenses" and "Research and Development" (FY 1962), 3 per centum of "Research, Development, and Operation" (FY 1963), 2 per centum of "Research and Development" (FY 1964 and 1965). The 30-day waiting period was introduced into the Section in FY 1964. The FY 1962 and 1963 language included a prohibition against use of funds made available under this subsection for projects for which Congress had previously denied authorization; such language has not been repeated in FY 1964, 1965 or 1966.)

4. Annual Independent Offices Appropriations Acts (specific quotations are taken from the FY 1966 Independent Offices Appropriation Act; where recent Appropriations Acts differed significantly from the FY 1966 Act, notation is made). (Caution: Provisions of the FY 1967 Independent Offices Appropriation Act, effective July 1, 1966, and subsequent Appropriation Acts may differ from the following provisions.):

R&D
Appropriation

Research and Development: "For necessary expenses, not otherwise provided for, including research, development, ... minor construction, ... maintenance, repair, and alteration of real and personal property; ... necessary for the conduct and support of aeronautical and space research and development activities of the NASA ..."

(Note: The FY 1964 language for "Research and Development" did not contain the words "minor construction" or "maintenance, repair, and alteration of real and personal property" whereas the FY 1965 language did.)

AO
Appropriation

Administrative Operations: "For necessary expenses, not otherwise provided for, of the operation of the NASA ...; minor construction, ... and maintenance, repair, and alteration of real and personal property; ..."

(Note: In FY 1963, the present "Administrative Operations" and "Research and Development" appropriations were combined in a single

"Research, Development, and Operations" appropriation, for which the words "repairs, alterations, minor construction" were included. Prior to FY 1963, the words "repairs, alterations, and minor construction" were contained in the language for "Research and Development".)

CofF
Appropriation

Construction of Facilities: "For advance planning, design, and construction of facilities for the NASA and for the acquisition or condemnation of real property, as authorized by law ... "

(Note: The words "advance planning, and design," did not appear until FY 1963, at which time Facility Planning and Design became a line item specified under "Construction of Facilities" in the NASA Authorization Acts. Until FY 1962, this appropriation was entitled "Construction and Equipment", and the word "equipment" appeared in the appropriation language.)

General Provisions:

Fund Transfer

"Not to exceed 5 per centum of any appropriation made available to the NASA by this Act may be transferred to any other such appropriation."

(Note 1: Prior to FY 1963, this transfer authority was not available to increase the "Salaries and Expenses" appropriation.)

(Note 2: The General Provisions for FY 1964 carried the following language, which was not repeated in the FY 1965 or FY 1966 language: "No part of any appropriation made available to the NASA by this Act for Research and Development may be used for the construction of any major facility, the estimated cost of which, including collateral equipment, exceeds \$250,000, unless (1) a period of thirty days has passed after the receipt by the Committee on Science and Astronautics of the House of Representatives and the Committee on Aeronautical and Space Sciences of the Senate of notice of the nature, location, and estimated cost of such facility, or, (2) each such committee before the expiration of such period has transmitted to the Administrator written notice to the effect that such committee has no objection to the construction of such facility.")

Lease of
Buildings

"After June 30, 1932 no appropriation shall be obligated or expended for the rent of any building or part of a building to be occupied for Government purposes at a rental in excess of the per annum rate of 15 per centum of the fair market value of the rented premises at date of the lease under which the premises are to be occupied by the Government nor for alterations, improvements, and repairs of the rented premises in excess of 25 per centum of the amount of the rent for the first year of the rental term, or for the rental term if less than one year: Provided, that the provisions of this section shall not apply to leases made prior to June 30, 1932, except when renewals thereof are made after such date, nor to leases of premises in foreign countries for the foreign services of the United States: Provided further, That the provisions of this section as applicable to rentals, shall apply only where the rental to be paid shall exceed \$2,000 per annum."

FACILITY PROJECT BUDGETING AND/OR FUNDING

Appendix C is intended for use as a guide for action officers only within the context of, and subject to, the policies and procedures set forth in this Handbook. It does not necessarily purport to set forth the full extent of NASA statutory authority. Furthermore, while all of Appendix C is subject to statutory law, some of which changes from year to year, it should be noted particularly that the so-called reprogramming or flexibility provisions of law may be exercised only within specified limits and then, in most cases, only after discretionary and/or ministerial acts by the Deputy Administrator or higher authority.

TYPE OF FACILITY PROJECT	Designated Appropriation (Indicated By "X")		
	AO	R&D	CofF
1. ACQUISITION			
a. Purchase of Land	-	-	X
b. Purchase of Other Real Property	-	-	X
c. Lease of Real Property:			
(1) Institutional Program Requirement	X	-	-
(2) Technical Program Requirement	-	X	-
d. Use permit (when reimbursable by NASA):			
(1) Institution Program Requirement	X	-	-
(2) Technical Program Requirement	-	X	-
2. DESIGN			
a. Conceptual Study Contracts (for possible future CofF Projects):			
(1) Institutional Program Requirement	X	-	-
(2) Technical Program Requirement	-	X	-
b. Preliminary Design (CofF Projects) (If performed by other than in-house personnel.)	-	-	X
c. Final Design (CofF Projects)	-	-	X
3. CONSTRUCTION			
a. Major (Cost ¹ in Excess of \$250,000 for existing facility; cost ¹ in excess of \$100,000 for new facility):			
(1) Normal Programming	-	-	X

¹Estimated cost (including collateral equipment).

TYPE OF FACILITY PROJECT	Designated Appropriation (Indicated By "X")		
	AO	R&D	CofF
(2) Urgent Reprogramming:			
- Section 1d ("items of a capital nature (other than acquisition of land) which may be required for the performance of research and development contracts") (when used to construct a major facility at an estimated cost ¹ in excess of \$250,000)	-	X	-
- Section 2 ("unusual cost variation")	-	-	X
- Section 3 ("urgent program changes")	-	-	X ²
b. Minor (Cost ¹ \$250,000 or less for existing facility; cost ¹ \$100,000 or less for new facility):			
(1) Institution Program Requirement	X	.	-
(2) Technical Program Requirement	-	X	.
4. REPAIR			
a. Major (Cost ¹ in excess of \$250,000):			
(1) Institutional Program Requirement	X	-	X
(2) Technical Program Requirement	-	X	X
b. Minor (Cost ¹ \$250,000 or less):			
(1) Institutional Program Requirement	X	-	-
(2) Technical Program Requirement	-	X	-
c. Emergency Repairs (Section 307(b))	-	-	X
5. ALTERATION			
a. Major (Cost ¹ in excess of \$250,000):			
(1) Institutional Program Requirements	X	-	X
(2) Technical Program Requirements	-	X	X
b. Minor (Cost ¹ of \$250,000 or less):			
(1) Institutional Program Requirements	X	-	-
(2) Technical Program Requirements	-	X	-

¹ Estimated cost (including collateral equipment).

² R&D may be used as source of funds by transfer to CofF.

TYPE OF FACILITY PROJECT	Designated Appropriation (Indicated By "X")		
	AO	R&D	CofF
6. Reimbursable Facility Project			
a. Major (Cost ¹ in excess of \$250,000)	-	-	X
b. Minor (Cost ¹ of \$250,000 or less):			
(1) Institutional Program Requirements	X	-	-
(2) Technical Program Requirements	-	X	-

¹Estimated cost (including collateral equipment).