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Procedure No. GLM-FE-8500.1-21

Revision: A

Effective Date: 4/2015

Expiration Date: 4/2020

GRC Environmental Programs Manual—Chapter 21

Cultural Resources

Approved by: Energy and Environmental Management Office Chief

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**NASA - Glenn Research Center
Cleveland, OH 44135**

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

Change Record

Revision	Effective Date	Expiration Date	C-25, Change Request #	Description
A	4/2015	4/2020		Updated all form links to reflect the NASA Electronic Form portal. Corrected several form names.

***Include all information for each revision. Do not remove old revision data. Add new rows to table when space runs out by pressing the tab key in the last row, far right column.*

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

Table of Contents

1.0	PURPOSE.....	4
2.0	APPLICABILITY	4
3.0	BACKGROUND.....	4
4.0	POLICY.....	4
5.0	RESPONSIBILITIES	5
5.1	Historic Preservation Officer	5
5.2	National Environmental Policy Act Program Leads at Lewis Field and Plum Brook Station.....	5
5.3	Property Disposal Officer	5
5.4	History Office Coordinator.....	5
5.5	Center Program Managers and Project Initiators	5
6.0	REQUIREMENTS	5
6.1	Procedural Requirements for Historic Preservation (<i>16 U.S. Code (U.S.C.) 470 et seq., EO 11593, 16 U.S.C. 470aa-470mm, 16 U.S.C. 469 et seq.</i>).....	5
6.2	Procedural Requirements for Managing Modifications to NASA’s Research Facilities (Appendix B).....	5
6.3	Procedural Requirement for Identification and Disposition of NASA Artifacts (<i>NPR 4310.1</i>)	5
7.0	RECORDS.....	6
8.0	REFERENCES	6
	APPENDIX A.—DEFINITIONS AND ACRONYMS	7
	APPENDIX B.—PROGRAMMATIC AGREEMENT AMONG THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, THE NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION	8

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

Chapter 21.—Cultural Resources

NOTE: This chapter is maintained and approved by the Energy and Environmental Management Office (EEMO). The last revision date of this chapter was March 2015. The current version is maintained on the Glenn Research Center internet at <http://www.grc.nasa.gov/WWW/FTD/EEMO/index.html>. Approved by: Chief of Energy and Environmental Management Office.

1.0 PURPOSE

This chapter establishes policies and procedures for managing cultural resources at the NASA Glenn Research Center's (GRC's) Lewis Field and Plum Brook Station (PBS).

2.0 APPLICABILITY

This chapter is applicable to all GRC actions that involve the management of cultural resources at GRC or at any NASA-controlled, Government-owned facilities associated with GRC. It is applicable to GRC employees and contractors at all levels who in any way participate in the formulation, development, and execution of qualifying NASA actions.

3.0 BACKGROUND

In 1966, Congress passed the National Historic Preservation Act (NHPA) to ensure that places of historic value were preserved and enhanced. Section 106 of the act requires Federal agencies to consult with the Advisory Council on Historic Preservation (ACHP) on actions adversely affecting listed or eligible properties. Under 36 Code of Federal Regulations (CFR) 800, Protection of Historic Properties, the consultation with the ACHP is conducted primarily through the Ohio Historic Preservation Office (OHPO).

GRC is mandated by the NHPA to consider the effects on historic and archaeological properties of any action undertaken by NASA, its contractors, or tenants on GRC land. There are two categories of properties of concern: those listed on the National Register of Historic Places (NRHP) and those eligible for listing. Whenever a project or action will or may adversely affect one of the Center's listed or eligible properties, GRC shall consult with the OHPO and the ACHP. Determination of the need for consultation is typically done through the use of the GRC Environmental Analysis Checklist (EVAL Checklist, **GRC150**) process. The **GRC150**—a questionnaire filled out by project managers at an early stage of project definition—lists most potential areas of likely environmental impacts. The checklist is submitted to the historic preservation officer (HPO) for review.

Three GRC facilities were designated by the National Park Service as National Historic Landmarks as a part of the 1984 Man in Space thematic nomination. They were the Rocket Engine Test Facility, the Zero Gravity Facility, and the Spacecraft Propulsion Research Facility (B-2 Facility at PBS). The Rocket Engine Test Facility has been demolished under a Programmatic Agreement with the ACHP.

Executive Order (EO) **11593**, Protection and Enhancement of the Cultural Environment, requires all Federal agencies to identify archaeological and historic properties under their jurisdiction that are eligible for listing in the NRHP and to take steps to avoid impacting them. It also calls for the complete documentation of any NRHP-eligible site or property that will be demolished as a result of a Federal undertaking. The [Archaeological Resources Protection Act of 1979](#) prohibits unauthorized excavation of archaeological resources on Federal land and on Native American land without a permit or memo to file issued by GRC's HPO.

In addition to facilities, NASA has additional responsibilities to preserve the unique objects under its control that document the history of the science and technology of aeronautics and astronautics.

4.0 POLICY

It is a goal of GRC to comply with all Federal, State, and Agency regulatory requirements related to cultural resources under its control. These include the NHPA, the Archaeological and Historic Preservation Act, and the Programmatic Agreement among the National Aeronautics and Space Administration, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation.

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

5.0 RESPONSIBILITIES

5.1 Historic Preservation Officer

The chief architect or their designee serves as the Historic Preservation Officer (HPO). The HPO issues an opinion on the culturally historic impacts of every **GRC150** that is forwarded to the National Environmental Policy Act (NEPA) program manager. The HPO communicates with the OHPO and the ACHP on historic preservation issues. The HPO maintains the Ohio Historic Inventory forms for GRC and is responsible for archaeological resources at GRC. Where excavations are proposed in archaeologically sensitive areas, the HPO arranges for subsurface testing per the procedures outlined in the Cultural Resources Management Plan for GRC. The HPO is also responsible for issuing a permit or memo to file to meet the requirements of the Archeological Resources Protection Act of 1979 when excavation of archaeological resources is to occur on Federal or Native American land.

5.2 National Environmental Policy Act Program Leads at Lewis Field and Plum Brook Station

The NEPA program leads review and approve **GRC8095**, Statement of Work (SOW) Requirements Review and Concurrence; **GRC150**; Safety Permit Requests; and Congressional Notification of Grants for NEPA concerns, including impacts to historic and archaeological assets. They provide support in the area of cultural resources management to the HPO and PBS management offices.

5.3 Property Disposal Officer

The property disposal officer is responsible for the disposal of artifacts excessed at GRC.

5.4 History Office Coordinator

The history office coordinator is responsible for managing the history contract at GRC. This coordinator is the focal point for communications regarding GRC's history with the History Office at NASA Headquarters and history contacts at other NASA centers.

5.5 Center Program Managers and Project Initiators

Program managers and project initiators shall complete the **GRC150** at the earliest stages of a program or project to initiate the determination if a project will or may adversely affect one of GRC's listed or eligible properties. The completed **GRC150** shall be submitted to the HPO.

6.0 REQUIREMENTS

6.1 Procedural Requirements for Historic Preservation (*16 U.S. Code (U.S.C.) 470 et seq., EO 11593, 16 U.S.C. 470aa-470mm, 16 U.S.C. 469 et seq.*)

The NHPA requires Federal agencies to consider the effects of their actions on cultural resources that are listed in or are eligible for listing in the NRHP. To evaluate the possible effects of the proposed actions, Section 106 of the NHPA requires an agency to identify and evaluate historic properties, assess the effects of the project on the properties, consult with the OHPO, and solicit comments from the ACHP in certain instances. Results of historic and archaeological surveys are recorded on Ohio Historic Inventory and Ohio Archaeological Inventory forms. The NHPA protects those sites in the project area that are listed in or eligible for listing in the NRHP.

6.2 Procedural Requirements for Managing Modifications to NASA's Research Facilities (**Appendix B**)

The Programmatic Agreement among the National Aeronautics and Space Administration, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation establishes the procedures that NASA must follow when considering significant modifications to known or suspected historic research facilities. The agreement establishes the procedures for consultation with the ACHP and the OHPO prior to entering into an agreement on historic recordation procedures.

6.3 Procedural Requirement for Identification and Disposition of NASA Artifacts (*NPR 4310.1*)

The National Air and Space Museum (NASM), which is administered by the Smithsonian Institution, is responsible for the custody, protection, preservation, exhibition, and loan of artifacts received from Government agencies. Repositories for NASA artifacts are identified with the assistance of the NASM so as to most effectively inform the public regarding NASA's endeavors. Artifacts are offered to the NASM when programmatic utility to NASA has been exhausted.

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

7.0 RECORDS

- Ohio Historic Inventory forms.—Maintained by the HPO.
- Ohio Archaeological Inventory forms.—Maintained by the NEPA program lead.
- Official correspondence with the OHPO.—Maintained by the HPO.

8.0 REFERENCES

Document number	Document name
16 U.S.C. 470 <i>et seq.</i>	National Historic Preservation Act of 1966
16 U.S.C. 469 <i>et seq.</i>	Archaeological and Historic Preservation Act
16 U.S.C. 470aa-470mm	Archaeological Resources Protection Act of 1979
25 U.S.C. 3001 <i>et seq.</i>	Native American Graves Protection and Repatriation Act
36 CFR 60	National Register of Historic Places
36 CFR 800	Protection of Historic Properties
42 U.S.C. 1996	American Indian Religious Freedom Act
EO 11593	Protection and Enhancement of the Cultural Environment
EO 13287	Preserve America
	Programmatic Agreement among the National Aeronautics and Space Administration, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation
	Cultural Resources Management Plan for Glenn Research Center at Lewis Field and Plum Brook Station

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

APPENDIX A.—DEFINITIONS AND ACRONYMS

Adverse effect.—An adverse effect is a Section 106 review finding in which it is determined that a proposed Federal action will adversely affect historic properties.

Advisory Council on Historic Preservation (ACHP).—This council was established under Section 201 of the National Historic Preservation Act of 1966. The mission of the ACHP is to promote the preservation, enhancement, and productive use of our Nation’s historic resources and to advise the President and Congress on national historic preservation policy.

Artifacts.—Artifacts, as applied to NASA, are unique objects that document the history of the science and technology of aeronautics and astronautics. Their significance and interest stem mainly from their relationship to historic flights, programs, activities, or incidents; achievements or improvements in technology; our understanding of the universe; and important or well-known personalities.

Code of Federal Regulations (CFR)

Glenn Research Center (GRC)

Historic Preservation Officer (HPO).—This official is designated by the director of each center responsible for coordinating that agency’s activities under the National Historic Preservation Act, as amended, and Executive Order 11593.

National Air and Space Museum (NASM)

National Environmental Policy Act (NEPA).—This Federal legislation established the national policy for protecting the human environment. NEPA requires Federal agencies to consider the environmental effects of their actions before beginning a project and to examine alternative actions that would reduce any threat or harm posed to the environment.

National Historic Preservation Act (NHPA).—This Federal legislation requires Federal agencies to consider the effects of their actions on cultural resources that are listed in or are eligible for listing in the National Register of Historic Places.

National Register of Historic Places (NRHP).—This national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture is maintained by the Secretary of the Interior under the authority of Section 101(a)(1)(A) of the National Historic Preservation Act, as amended.

Ohio Archaeological Inventory.—This inventory contains the official record of archaeological site locations and information on such sites in Ohio. It is maintained by the Ohio Historic Preservation Office.

Ohio Historic Inventory.—This inventory is an ongoing State-wide survey of buildings, structures, and sites of architectural and historical significance. It is maintained by the Ohio Historic Preservation Office.

Ohio Historic Preservation Office (OHPO).—This division of the Ohio Historical Society, also known as the Historic Preservation Division, carries out mandated functions of the National Historic Preservation Act for the State.

Ohio Historic Preservation Officer.—This official is appointed or designated pursuant to Section 101(b)(1) of the National Historic Preservation Act to administer the State historic preservation program or a representative designated to act for the Ohio Historic Preservation Officer.

Plum Brook Station (PBS)

Section 106 of the National Historic Preservation Act of 1966.—This section of the National Historic Preservation Act of 1966 states: “The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any effect Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation a reasonable opportunity to comment with regard to such undertaking.”

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

APPENDIX B.—PROGRAMMATIC AGREEMENT AMONG THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, THE NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

WHEREAS, the National Aeronautics and Space Administration (NASA) undertakes research, development, space mission operations, and management use of its facilities which have been designated as National Historic Landmarks (Landmarks) (Attachment 1); and

WHEREAS, such facilities require frequent modification over the life of agency missions to adapt them to meet the requirements of ongoing NASA programs; and

WHEREAS, NASA has determined that such modifications may have an effect on those Landmarks, and has consulted with the National Conference of State Historic Preservation Officers (NCSHPO) and the Advisory Council on Historic Preservation (Council) pursuant to the regulations (36 CFR Part 800) implementing Sections 106 and 110(f) of the National Historic Preservation Act, as amended (16 U.S.C. 470f and 470h-2(f)); and

WHEREAS, the Department of the Interior, National Park Service (NPS) was invited and participated in the consultation;

NOW, THEREFORE, NASA, the NCSHPO, and the Council agree that the programs shall be implemented in accordance with the following stipulations in order to take into account the effect of the programs and specific undertakings on the Landmarks.

Stipulations

NASA will ensure that the following measures are carried out.

I. Categories of Activities

A. When the proposed undertaking involves any of the following activities, NASA shall consult with the appropriate SHPO and, as necessary, the Council in accordance with Stip. II:

1. Demolition, dismantling, or relocation of original engineering structures, or of buildings housing facilities;
2. Removal or excessing of significant elements of the Landmarks specifically named on the National Register nomination forms;
3. New construction not compatible with major portions of the original structure or which alter the characteristics of the facility which were specified as the reason for its Landmark designation; or
4. Changes in function, purpose, or use of a facility.

Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

B. When the proposed undertaking is limited to the following activities that will not alter the characteristics of the facility which were specified as the reason for its landmark designation, NASA shall develop and implement mitigation measures in accordance with Stipulation III:

1. Replacement of historic hardware or components;
2. Modification of the original structure or equipment used in engineering structures, or buildings housing facilities; or
3. New construction compatible with existing structure, purpose, and operation of the facility.

NASA shall include a description of such activities and mitigation measures in the annual summary of its activities prepared pursuant to Stipulation IV.A.

C. When the proposed undertaking involves none of the activities specified above, NASA may proceed without consultation or the implementation of mitigation measures.

II. Consultation Process

A. Consultation required under Stip. I.A. shall be conducted as follows:

1. NASA shall provide the following documentation to the SHPO for review:
 - a. a description of the undertaking, with photos, maps, and drawings;
 - b. a description of the affected Landmark;
 - c. a description of the effects of the undertaking on the affected Landmark;
 - d. a description of alternatives to the proposed action, which were considered if any, and reasons not chosen;
 - e. a description of any mitigation measures proposed;
 - f. a description of NASA's effort, if appropriate, to obtain and consider views of affected interested persons on the proposed undertaking, including a copy of any comments received; and
 - g. the planning and approval schedule for the proposed undertaking.

Whenever feasible, NASA shall give the SHPO advance notice that such documentation is under preparation, and advise the SHPO of a date certain that it intends to submit the documentation to the SHPO.

2. The SHPO shall respond to a written request for consultation (accompanied by the documentation specified in Stip. II.A.1) within 20 working days, and agree, conditionally agree, or disagree with NASA's proposal.

3. If NASA does not accept the SHPO's conditions, or if NASA and the SHPO disagree, NASA shall notify the Council and forward copies of the documentation specified in Stip. II.A.1, above, along with other information relevant to the dispute.

Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

4. Within 20 working days, the Council shall either: (1) attempt to resolve the dispute; (2) provide NASA with recommendations to be taken into account in implementing the activity; or (3) decide to comment, and comment within 45 working days of that decision. At NASA's request, the time periods in Stips. II.A.2. and II.A.4. will run concurrently. In exceptional circumstances NASA may request accelerated consideration under Stip. II.A.4. and the Council will make a good faith effort to accommodate such requests. The Council may consult with the National Park Service of the Department of the Interior during its review period.

B. The Council and the NCSHPO recognize that operational emergency situations may arise where NASA must take immediate action without prior consultation with the appropriate SHPO or the Council. In such situations, NASA shall notify the Council and the SHPO of such actions as soon as practicable.

III. Mitigation

Mitigation measures shall be carried out prior to undertaking actions specified in Stips. I.A. and I.B.

A. Recordation

1. Recordation shall be done in accordance with the Secretary of the Interior's "Standards for Architectural and engineering Documentation" (Standards) (Federal Register, 48 FR 190, pp. 44730-44734, September 29, 1983).

2. Because original "as-built" drawings and other records are on file at the installations containing Landmark facilities, documentation will normally include the following: (1) reproduction of existing "as-built" drawings and site plans modified on standard size (19 x 24 or 24 x 36) mylar; and (2) provision of black and white archival quality photos with large format negatives of exterior and interior views, as appropriate, as well as special technological features or engineering details.

3. Original copies of all documentation shall be provided to the Secretary of the Interior in accordance with the Standards for incorporation into the National Architectural and Engineering Records in the Library of Congress as provided in Section 101 of the National Historic Preservation Act and implementing procedures. Copies of the documentation shall also be provided to the appropriate SHPO.

B. Salvage

NASA will apply its agreement with the Smithsonian Institution (NASA Management Instruction 4310.4) to determine appropriate retention and curation activities with respect to significant artifacts.

Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

IV. Continuing Coordination

A. On or about December 1, 1990, and annually thereafter, NASA will provide a summary of its activities under this Agreement to the Council and to the NCSHPO.

B. In consultation with the appropriate SHPO, the Council may review and comment upon individual undertakings when it determines that historic preservation issues warrant such action.

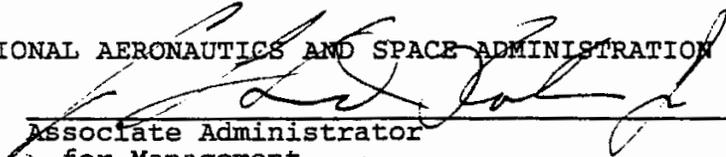
C. NASA will provide appropriate public information about activities under Stip.I.A. to interested parties upon request.

D. Any party to this Agreement may terminate it by providing 60 days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination.

Execution of this Programmatic Agreement and carrying out its terms evidences that NASA has afforded the Council and the NCSHPO a reasonable opportunity to comment on its programs affecting Landmarks under Sections 106 and 110(f) of the National Historic Preservation Act, and that NASA has taken into account the effects of its programs on these Landmarks.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

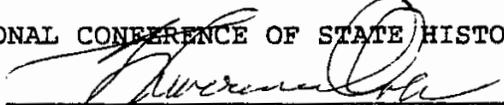
By:


Associate Administrator
for Management

9/29/89
Date

NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS

By:


President

10/6/89
Date

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By:


Chairman

September 18, 1989
Date

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Glenn Research Center Environmental Programs Manual	Title: Cultural Resources	
	Document No.: GLM-FE-8500.1-21	Rev.: A

NASA's NATIONAL HISTORIC LANDMARKS

(as of 2/24/89)

1. Variable Density Tunnel (Langley Research Center, Hampton, VA)
2. Full Scale Tunnel (Langley Research Center, Hampton, VA)
3. Eight-Foot High Speed Tunnel (Langley Research Center, Hampton, VA)
4. Unitary Plan Wind Tunnel (Ames Research Center, Moffett Field, CA)
5. Rocket Engine Test Facility (Lewis Research Center, Cleveland, OH)
6. Zero-Gravity Research Facility (Lewis Research Center, Cleveland, OH)
7. Spacecraft Propulsion Research Facility (Lewis Plum Brook Operations Facility)
8. Redstone Test Stand (George C. Marshall Space Flight Center, AL)
9. Propulsion and Structural Test Facility (George C. Marshall Space Flight Center, AL)
10. Rocket Propulsion Test Complex (Stennis Space Center, MS)
11. Saturn V Dynamic Test Stand (George C. Marshall Space Flight Center, AL)
12. Lunar Landing Research Facility (Langley Research Center, Hampton, VA)
13. Rendezvous Docking Simulator (Langley Research Center, Hampton, VA)
14. Neutral Bouyancy Space Simulator (George C. Marshall Space Flight Center, AL)
15. Space Environment Simulation Laboratory (Lyndon B. Johnson Space Center, Houston, TX)
16. Spacecraft Magnetic Test Facility (Goddard Space Flight Center, Greenbelt, MD)
17. Twenty-Five-Foot Space Simulator (Jet Propulsion Laboratory, Pasadena, CA)
18. Pioneer Deep Space Station (Goldstone Deep Communications Complex, CA)
19. Space Flight Operations Facility (Jet Propulsion Laboratory, Pasadena, CA)
20. Apollo Mission Control Center (Lyndon B. Johnson Space Center, Houston, TX)

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