PROGRAMMATIC AGREEMENT AMONG THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION JOHN F. KENNEDY SPACE CENTER, ADVISORY COUNCIL ON HISTORIC PRESERVATION, AND THE FLORIDA STATE HISTORIC PRESERVATION OFFICER REGARDING MANAGEMENT OF HISTORIC PROPERTIES AT THE KENNEDY SPACE CENTER, FLORIDA

WHEREAS, following the January 14, 2004, speech by President George W. Bush outlining a new space exploration initiative to return to the Moon and ultimately travel to Mars and beyond, the National Aeronautics and Space Administration (NASA) released The Vision for Space Exploration, now, Exploration mission, which outlined the Agency's approach to the new direction in space exploration; and

WHEREAS, in 2006 NASA announced the start of the Constellation Program (CxP), which included development of a new class of exploration vehicles to launch both crew and cargo and associated infrastructure in exploring the Moon, Mars, and beyond; and

WHEREAS, NASA's greatest challenges and top priorities will be to safely fly out the Space Shuttle manifest, complete assembly of the International Space Station, and honor commitments to our international partners prior to retiring the Shuttle in 2010, all while developing the new Constellation space systems and preparing them for flight as soon as possible after the Shuttle's last mission; and

WHEREAS, to accomplish the Exploration mission, NASA must manage its limited resources and maximize the use of its facilities (including unoccupied facilities, equipment, and structures), which includes the phase-out of the Space Shuttle program (SSP) in the year 2010; and

WHEREAS, today NASA's John F. Kennedy Space Center (NASA-KSC) is primarily responsible for processing and launching Space Shuttle missions. NASA-KSC manages the ground operations, including pre- and postlaunch support and landing and recovery planning and execution, along with support to robotic missions and management of NASA-KSC facilities; and

WHEREAS, in order for NASA-KSC to support the Exploration mission, some of their historically significant facilities and/or structures will require modifications to meet the requirements of new and ongoing NASA programs. Such modifications may result in adverse effects to these historic properties, as defined in 36 CFR Part 800, Protection of Historic Properties; and

WHEREAS, NASA-KSC recently completed its inventory and evaluation of the SSP historic properties at KSC, which includes a listing of historically significant facilities and/or structures located in or associated with such properties and historic districts, and that the inventory and evaluation was approved by the Florida State Historic Preservation Officer (SHPO) on May 27, 2008 (reference Appendix A); and

WHEREAS, some of those facilities located at NASA-KSC are listed or determined eligible for inclusion on the National Register of Historic Places (NRHP) in the contexts of the Apollo program and SSP (see Appendix B); and

WHEREAS, some of the historic facilities at NASA-KSC associated originally with the Apollo program have been reused, modified, or replaced as the SSP became operational, and some of these, along with historic facilities associated originally with the Space Shuttle, will be reused, modified, or replaced as the CxP becomes operational; and

WHEREAS, NASA-KSC, in consultation with the SHPO and the Advisory Council on Historic Preservation (ACHP), developed this Programmatic Agreement (PA) pursuant to Section 800.14 of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (NHPA), as amended (16 U.S.C. 470f); and

WHEREAS, NASA-KSC elected to fulfill its obligations under Section 106 of the NHPA through execution and implementation of this PA, as provided in 36 CFR Part 800; and

WHEREAS, the purpose of this PA is to ensure that the historic, engineering, and architectural values (reference "*Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities*," dated 1991) of the historic properties under the jurisdiction of NASA-KSC are recognized and considered in the course of ongoing NASA programs and to provide a protocol for the reuse, modification, replacement, or removal of historic facilities associated with current and future programs; and

WHEREAS, this PA covers the management of existing and future historic, ground-based facilities and structures that are listed or determined eligible on the NRHP that are owned by NASA-KSC; and

WHEREAS, this PA does not cover the listed National Historic Landmarks (NHLs) covered under an existing agreement among the National Aeronautics and Space Administration, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, dated October 1989, regarding NASA's designated NHLs and the listed or determined eligible archaeological sites owned by NASA-KSC; and

WHEREAS, when a new facility and/or structure is listed or determined eligible on the NRHP, this PA will be applicable and the same process will be implemented.

NOW, THEREFORE, all signatories agree that NASA-KSC can proceed with those undertakings in accordance with the following stipulations in order to take into account the effects of its undertakings on the historic properties and/or structures and that these stipulations shall govern the management of historic properties and/or structures in satisfaction of NASA-KSC's Section 106 responsibilities under the NHPA, until this PA expires or is terminated.

STIPULATIONS

NASA-KSC will ensure that the following measures are carried out:

I. KSC Historic Properties and Cultural Resources Management Plan

A. NASA-KSC will update the Cultural Resources Management Plan every five (5) years.

B. NASA-KSC will update its inventory of historic properties every five (5) years.

II. Categories of Undertakings

A. When the proposed action involves any category of undertaking that is listed in Appendix C and therefore exempt from the Section 106 review as agreed to by NASA-KSC, the SHPO, and the ACHP, NASA-KSC can proceed with their proposed undertaking without public notification or consultation from the SHPO and/or the ACHP.

B. Any signatory party to this PA can propose additions to the list of undertakings that do not require consultation listed in Appendix C. These undertakings will be added to Appendix C if mutually agreed upon by all signatory parties.

C. The following undertakings involving facilities listed or determined eligible in Appendix B require consultation with the SHPO and, as appropriate, the ACHP in accordance with Stipulation III, as necessary, and the implementation of mitigation measures, in accordance with Stipulations IV and V. After consultation and agreement of mitigation measures, no further agreement document will be required for implementation of undertaking.

1. Demolition and dismantlement, including the physical destruction of, or damage to, all or part of the historic property and/or structure.

2. Alterations including, but not limited to, the replacement of building materials with noncompatible materials and additions to historic properties and/or structures; removal or excessing of historically

significant elements/equipment; significant changes to floor plans; and partial demolition.

3. New construction within or proximate to the boundaries of the historic property and/or structure where such new construction adversely affects those qualities that make the property significant, including creating a visually intrusive element, or is of noncompatible design and placement.

4. Repair and maintenance, if such actions result in a change in the existing structural integrity, operational function, or visual integrity of the historic property and/or structure.

5. Neglect, including the reduction or withdrawal of maintenance, resulting in deterioration of historically significant elements.

6. Transfer, sale, or lease of the historic property and/or structure to another agency or non-Federal entity without appropriate and enforceable preservation covenants.

7. Removal of the historic property and/or structure from its historic setting.

8. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.

III. Consultation

A. In consultation with the SHPO, NASA-KSC shall apply the criteria of effect and adverse effect in accordance with 36 CFR Part 800.4(d) and 5(a). NASA-KSC shall provide to the SHPO the appropriate information and documentation as set out in 36 CFR Part 800.11(d) and (e).

B. When a determination is made that an undertaking may have an adverse effect, NASA-KSC shall provide the following documentation to the SHPO for review and notify the ACHP:

1. A description of the undertaking with photographs, maps, and drawings.

2. A description of the affected historic property and/or structure.

3. A description of alternatives considered to avoid or minimize adverse effects to the historic property and/or structure and the reasons why they were not chosen.

4. A description of NASA-KSC's efforts, if appropriate, to obtain and consider views of affected, interested persons on the proposed undertaking including a copy of any comments received.

5. An approved planning schedule for the proposed undertaking.

C. The SHPO has thirty (30) days to comment on the proposed undertaking. If the SHPO fails to respond within thirty (30) days of receipt of a request for review of a finding or determination and its supporting documentation set out above, NASA-KSC may either proceed to the next step in the process based on the finding or determination or consult with the ACHP in lieu of the SHPO.

IV. Mitigation of Adverse Effects

A. When NASA-KSC, in consultation with the SHPO, determines that program activities will adversely affect those qualities that qualify an historic property and/or structure for listing or determined eligible on the NRHP, and that avoidance or in-place preservation is not feasible, NASA-KSC shall ensure that a mitigation plan is developed for these properties.

B. When it is determined that an undertaking will have an adverse effect, NASA-KSC will arrange for public participation and take steps to involve individuals, organizations, and entities likely to be interested, pursuant to 36 CFR 800.2(d)(1) and (2). NASA-KSC will provide appropriate public information about activities to interested parties upon request.

C. NASA-KSC will ensure that all mitigation measures are developed in consultation with the SHPO, and will be appropriate to the nature of the undertaking, and take into account the character-defining elements which make the respective historic property and/or structure listed or eligible for inclusion on the NRHP. Appropriate treatments for each undertaking will, as appropriate, include one or more of the measures identified in Stipulation V.

D. Should NASA-KSC and the SHPO not agree on the terms of the mitigation plan, then NASA-KSC will request the ACHP's comments in accordance with Stipulation VIII.C, "Dispute Resolution."

E. NASA-KSC will ensure that qualified professionals meeting the *Secretary of the Interior's Professional Qualifications Standards* (48 FR 44716, dated September 29, 1983) will conduct all identification, evaluation, and documentation of historic properties and will ensure that the contents of all documents and studies prepared by contractors meet applicable standards and guidelines.

F. NASA-KSC, whenever feasible, shall give the SHPO and/or the ACHP advance notice that such documentation is being prepared and advise them when NASA-KSC intends to forward said documentation.

G. Unless the SHPO and/or the ACHP objects within thirty (30) working days of receipt of the documentation on the adequacy, appropriateness, or extent of any mitigation plan, NASA-KSC shall ensure that the mitigation plan is implemented, pursuant to 36 CFR 800.5(c)(1).

V. Mitigation Options

A. Recordation:

1. In accordance with Section 110 of the NHPA, recordation will be undertaken prior to substantial alteration or demolition. Recordation will consist of drawings, photographs, written documentation, video or audio recordings, or any other medium or any combination thereof, to be determined in consultation with the SHPO. Standard recordation may include the following:

    a. Hard copies or digital reproductions of existing "as-built" drawings and site plans or creation of new measured drawings.
    b. Perspective-corrected film or digital photographs showing representative exterior and interior views, as appropriate, as well as contributing features such as special technological features or engineering details.
    c. A written historic narrative.

2. If there are multiple assets of a specific property type (e.g., three Mobile Launcher Platforms, two Payload Canisters, two Launch Pads A and B, and two Crawler Transporters) that are 95 percent identical, NASA-KSC will provide recordation of only one of the assets as part of the mitigation for all assets as fulfillment of the Section 106 obligations such as reuse, transfer, demolition, etc.

3. NASA-KSC plans to conduct early recordation of their historic facilities and/or structures listed or determined eligible on the NRHP to support mitigation efforts required by Section 106 obligations to support future programs.

4. Recordation may consist of an assemblage of existing materials in NASA-KSC's own collection or other relevant repository. In such cases where existing materials do not adequately record the historic property and/or the contributing features, NASA-KSC shall produce new drawings, photographs, written narratives, or other materials, as appropriate.

5. Copies of all materials, such as Historic American Building Survey/Historic American Engineering Report, will be provided to the SHPO and/or the National Park Service as well as the KSC Archivist. Records shall be deposited with an appropriate agency or repository for future use and reference.

6. Recordation materials subject to Export Control and International Traffic in Arms Regulations will be distributed to a publicly accessible repository capable of managing classified or other secure materials, such as the National Archives and Records Administration.

B. **Salvage and/or Artifacts**. Architectural or scientific/engineering elements from historic properties scheduled for demolition and dismantlement will be salvaged, where appropriate.

1. NASA-KSC will ensure that salvage will not be undertaken without prior documentation, as described in Stipulation V.A. Qualified professionals meeting the *Secretary of the Interior's Professional Qualifications Standards* shall survey the historic property to identify if any artifacts or structural elements are worthy of salvage for preservation purposes.

2. NASA-KSC shall ensure that the items selected are removed in a manner that minimizes damage.

3. NASA-KSC will apply its most recent agreement with the Smithsonian Institution ("Agreement Between the National Aeronautics and Space Administration and the Smithsonian Institution Concerning the Transfer and Management of Historical Artifacts"), as set forth in NASA Procedural Requirements 4310.1, to determine appropriate retention and curation activities with respect to significant artifacts.

4. In consultation with the SHPO, NASA-KSC will make available salvaged architectural or scientific/engineering elements not wanted by the Smithsonian to appropriate state and local museums and historical organizations that can demonstrate the ability to preserve and interpret these elements.

C. **Public Interpretation**: A variety of public interpretation initiatives will be undertaken, as appropriate, for the purpose of enhancing the public's undertaking of NASA-KSC's historic properties. These include, but are not limited to:

1. Web-based products for educational purposes featuring the historic property and/or structure as part of the heritage of NASA-KSC. This

product will be hosted on NASA's Web site for millions around the world to experience.

2. Reports and pamphlets suitable for the general public describing the historic property and/or structure and its role in the United States space program.

3. Collection and assembling of documents, including testing schedules, technical reports, public relations materials, historic photographs, engineering drawings, maps, etc.

4. Identification, collection, preservation, and display of significant objects relating to the history of NASA-KSC, including tools, instruments, scale models, clothing, etc.

5. The systematic collection of oral histories from long-term NASA-KSC and contractor employees, providing information on employee experiences and social history not available in written sources.

D. **Offsite Mitigation.** In keeping with the National Aeronautics and Space Act of 1958 which charges NASA with the development of public education and outreach programs, NASA-KSC will, as appropriate, undertake the following:

1. Provide support for research and written popular and technical histories and other accounts.

2. Provide support for the existing offices of Agency Historians and Archivists to further the increased dissemination of historical documentation and official Agency histories already available but little known outside of NASA.

3. Foster opportunities for public/private partnerships that have been established by NASA's excess property disposition processes to preserve the tangible elements of America's manned and unmanned space programs through artifact donations in order to share pieces of the NASA-KSC's history with public institutions.

E. **Adaptive Reuse**: Where feasible, historic buildings and/or structures which no longer support NASA-KSC's ongoing programs may be adaptively reused. The NASA-KSC Real Property Officer will compile and maintain an updated list of such buildings and/or structures, their size and condition, so that when new space is needed these can be considered for reuse.

VI. Archaeological Discoveries

A. In the case of undertakings that involve ground disturbance on or adjacent to identified archaeological sites, NASA-KSC will consider ways to avoid adverse effects to these sites. If adverse effects cannot be avoided, NASA-KSC will determine, in consultation with the SHPO/Tribal Historic Preservation Officer (THPO), an appropriate mitigation plan.

B. In the case of undertaking that involve ground disturbance of less than one (1) acre in size, but no identified archaeological sites are present within or adjacent to the project area, NASA-KSC shall proceed without further consultation regarding archaeological resources. If, however, archaeological resources, including burials, funerary objects, or other archaeological artifacts are discovered during the course of the work, NASA-KSC shall cease work immediately, limit access to the site, and consult with the SHPO/THPO in accordance with the ACHP's regulations (36 CFR Part 800.13) to determine and implement the appropriate identification, evaluation, and mitigation plan.

VII. Emergency Situations

In those situations where unanticipated and sudden events, including, but not limited to, floods, fires, and/or hurricanes that result in or that cause or effect the alterations of the structural stability of a historic property and/or structure, rendering it an immediate health and safety hazard, NASA-KSC will take the necessary steps to comply with the ACHP's regulations for emergency situations (36 CFR Part 800.12) and make the historic property and/or structure safe and secure. Within ten (10) days, or as soon as practicable, NASA-KSC shall notify the SHPO or the ACHP of such actions, providing a brief description of the nature of the emergency and corrective work.

VIII. Administrative Stipulations

A. **Programmatic Agreement.** Execution of this PA does not prohibit NASA-KSC from developing other agreement documents to govern the management of historic properties and/or structures at NASA-KSC, provided that subsequent agreements meet the intent of this Agreement. This PA does not supersede the existing PA among the National Aeronautics and Space Administration, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, dated October 1989, regarding NASA's designated NHLs.

B. **Definitions.** Appendix D contains a list of terms and definitions in accordance with 36 CFR Part 800.16.

C. **Dispute Resolution.** Should any signatory party to this PA object in writing to NASA-KSC regarding any undertakings proposed or initiated pursuant to

this PA, NASA-KSC shall consult with the objecting party to try to resolve the objection. If NASA-KSC determines that the objection cannot be resolved through consultation, the Agency shall forward all documentation relevant to the objection to the ACHP, including NASA-KSC's proposed response to the objection. Within thirty (30) days after receipt of all pertinent documentation, the ACHP will either:

1. Provide written concurrence with the proposed response to the objection, whereupon NASA-KSC will respond to the objection accordingly; or

2. Provide recommendations, which NASA-KSC will take into account in reaching a final decision regarding the dispute; or

3. Notify NASA-KSC that the objection will be referred for comment pursuant to 36 CFR 800.7(a)(4) and proceed to refer the objection and comment. NASA-KSC shall take the resulting comment into account in accordance with 36 CFR 800.7(c)(4) and Section 110(1) of the NHPA.

Should the ACHP not exercise one of the above options within thirty (30) days after receipt of all pertinent documentation, NASA-KSC will assume ACHP's concurrence in its proposed response to the objection and will respond to the objection accordingly. Any recommendation or comment provided by the ACHP will be understood to pertain only to the subject of the dispute.

D. **Annual Report and Review**. Beginning one (1) year after execution of this PA, and every year thereafter, NASA-KSC will prepare an annual report summarizing the status of compliance with the terms of this PA and a summary of the activities for the past year. Annual reports will be submitted by the end of the calendar year by NASA-KSC to all signatories. The signatories to this PA will review the annual report and determine whether revisions to the PA are needed within thirty (30) days of the submission of the annual reports. If all signatories agree that revisions to the PA are needed, such revisions will be implemented pursuant to Stipulation VIII.E., "Amendments." NASA-KSC shall also ensure that its annual report is made available for public inspection, that potentially interested members of the public are made aware of its availability, and that interested members of the public are invited to provide comments to the ACHP, the SHPO, and NASA-KSC.

E. **Amendments.** Any signatory party to this PA may request that it be amended, whereupon the signatory parties will consult to consider such an amendment. All parties must signify their acceptance of the proposed changes to the PA in writing within thirty (30) days of their receipt. This PA

shall only be amended by a written instrument executed by all the parties. Where no consensus can be reached, the PA will not be amended.

F. **Termination.** Any signatory party to this PA may terminate it by providing thirty (30) 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. In the event of termination, NASA-KSC will comply with the requirements of 36 CFR Part 800 (800.3 through 800.6) with regard to individual undertakings otherwise covered by this PA.

G. **Anti-Deficiency Act**. All activities pursuant to this PA are subject to the availability and allocation of appropriated funds for such purposes. Should NASA-KSC be unable to fulfill the terms of this PA, they will immediately notify the ACHP and the SHPO and consult to determine whether to amend or terminate the PA pending the availability of resources.

H. **Sunset Clause.** If the terms of the PA have not been implemented within three (3) years of signing, this PA shall be considered null and void. In such event, NASA-KSC shall so notify the signatories to this PA, and if they choose to continue with the undertaking, shall reinitiate review of the undertaking in accordance with 36 CFR Part 800.

I. **Effective Date and Duration**. The effective date of this PA will be the date of the last signature. The signatory parties agree this PA is subject to the annual review required in Stipulation VIII.D. and shall continue in full force until it is amended or terminated, as provided in Stipulation VIII.E. and F., respectively.

Execution and implementation of this PA evidences that NASA-KSC has satisfied its Section 106 responsibilities under the NHPA for all individual undertakings for current and future programs.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

By: *Original signed by* 4/8/09
Robert D. Cabana DATE
Director, John F. Kennedy Space Center

FLORIDA STATE HISTORIC PRESERVATION OFFICE

By: *Original signed by* 4/13/09
Frederick P. Gaske DATE
Florida State Historic Preservation Officer

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: *Original signed by* 5/18/09
John M. Fowler DATE
Executive Director, Advisory Council on Historic Preservation

APPENDIX A

FLORIDA DEPARTMENT OF STATE
Kurt s. Browning
Secretary of State
DIVISION OF HISTORICAL RESOURCES

May 27, 2008

Ms. Barbara Naylor
Mail Code TA-C4
John F. Kennedy Space Center, NASA
Kennedy Space Center, FL 32899

Re: SHPO/DHR Project File No: 2007-9035
Received: December 6, 2007
Survey and Evaluation of NASA-owned Historic Facilities and Properties In the Context of the U.S. Space Shuttle Program – John F. Kennedy Space Center – Brevard County, Florida
Archaeological Consultants, Inc.; October 2007

Dear Ms. Naylor:

Our office received and reviewed the above referenced survey report in accordance with Section 106 of the *National Historic Preservation Act of 1966* as amended in 1992; *36 C.F.R., Part 800: Protection of Historic Properties*; and Chapter 267, *Florida Statutes*, for assessment of possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the *National Register of Historic Places (NRHP)*.

In October 2007, Archaeological Consultants, Inc. completed an intensive survey of Space Shuttle Program (SSP) facilities and properties at Kennedy Space Center (KSC) on behalf of the National Aeronautics and Space Administration. One hundred and twelve (112) properties were identified and evaluated. Seventy-six (76) properties were determined to meet the criteria of eligibility for listing in the *NRHP*, or are currently listed in the *NRHP*; and 40 properties identified and evaluated did not meet the criteria for listing in the NRHP. Of the 76 NRHP eligible properties, 26 of them are individually eligible properties, and the remaining properties are contributing resources one of the six historic districts. Four new districts were identified, in addition to the two previously NRHP listed districts at KSC.

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☑ Historic Preservation
(850) 245-6333 • FAX: 245-6437

Based on the very thorough documentation provided in this unique resource type survey effort, our office concurs with the evaluations completed by ACI and presented by NASA to this office as a completed inventory of SSP facilities and properties at KSC. We find the submitted report sufficient in all aspects of Chapter 1A-46, *Florida Administrative Code*. .

If you have any questions concerning our comments, please contact Laura Kammerer, Deputy State Historic Preservation Officer for Review and Compliance, at 850-245-6333 or lkammerer@dos.state.fl.us. Thank you for your interest in protecting Florida's historic properties.

Sincerely,

Frederick P. Gaske, Director, and
State Historic Preservation Officer

Facility Number	*Site File Number*	*Facility Name*	*Associated Programs*	*Listed, Eligible, Individual (I), or Contributing (C) Resource*
OV-104	No BR #	Orbiter Atlantis	Space Shuttle Program	Eligible, I
K6-848	8BR1684	Vehicle Assembly Building	Apollo Program Space Shuttle Program	Listed, I Eligible, I
K6-947	No BR #	VAB Annex (contributing to VAB)	Apollo Program	Listed, C
K7-1005	8BR2986	Barge Terminal Facility (contributing to VAB)	Apollo Program Space Shuttle Program	Eligible, C Eligible, C
K6-900	8BR1685	Launch Control Center	Apollo Program Space Shuttle Program	Listed, I Eligible, I
UK-008	8BR1689	Crawlerway	Apollo Program Space Shuttle Program	Listed, I Eligible, Il
No #	8BR1688	Crawler Transporter 1 & 2	Apollo Program Space Shuttle Program	Listed, I Eligible, I
No #	8BR1690	Press Site: Clock and Flag Pole	Apollo Program Space Shuttle Program	Listed, I Eligible, I
M6-399	8BR1691	Headquarters Building	Apollo Program	Listed, I
M7-355	8BR1693	Neil Armstrong Operations and Checkout Building	Apollo Program	Listed, I
M6-342	8BR1692	Central Instrumentation Facility	Apollo Program	Listed, I
L6-247	8BR1998	Manufacturing Building	Space Shuttle Program	Eligible, I
M7-657	8BR2014	Parachute Refurbishment Facility	Space Shuttle Program	Eligible, I
M7-777	8BR2016	Canister Rotation Facility (aka Launch Abort System Facility)	Space Shuttle Program	Eligible, I
No #	8BR2021	Mobile Launcher Platforms (3)	Space Shuttle Program	Eligible, I
K6-494	8BR1997	Rotation/Processing Facility	Space Shuttle Program	Eligible, I
M7-360	8BR2671	Space Station Processing Facility	International Space Station Program	Eligible, I
M7-0361A	No BR #	Ammonia Vapor Containment Building (Contributing to SSPF)	International Space Station Program	Eligible, C
K8-1699	8BR2990	Beach House	Apollo Program Space Shuttle Program	Eligible, I Eligible, I
M7-1212	8BR2933	Hypergol Module Processing South	Space Shuttle Program	Eligible, I
M7-0409	8BR2969	Engineering Development Lab	Apollo Program	Eligible, I
M3-0003	8BR2956	Indian River Bridge	Apollo Program Space Shuttle Program International Space Station Program	Eligible, I Eligible, I Eligible, I

Facility Number	*Site File Number*	*Facility Name*	*Associated Programs*	*Listed, Eligible, Individual (I), or Contributing (C) Resource*
M7-1150	8BR2955	Banana River Bridge	Apollo Program Space Shuttle Program International Space Station Program	Eligible, I Eligible, I Eligible, II
	8BR1686	**Launch Complex 39A Historic District**	Apollo Program Space Shuttle Program	Listed, I, C Eligible, I, C
J8-1708	8BR1995	Launch Complex 39A	Apollo Program Space Shuttle Program	Listed, I, C Eligible, I, C
J8-1462	8BR2094	High Pressure GH2 Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1502	8BR2095	LOX Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1503	8BR2096	A-1 Operations Support Building	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1614	8BR2102	A-2 Operations Support Building	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1512	8BR2097	Camera Pad No. 1	Apollo Program Space Shuttle Program	Listed, Co Eligible, C
J8-1714	8BR2105	Camera Pad No. 2	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1961	8BR2107	Camera Pad No. 3	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1956	8BR2106	Camera Pad No. 4	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1554	8BR2100	Camera Pad No. 6	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1513	8BR2098	LH2 Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1563	8BR2101	Electrical Equipment Building No. 1	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1553	8BR2099	Electrical Equipment Building No. 2	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1811	8BR2110	Electrical Equipment Building No. 3	Space Shuttle Program	Eligible, C
J8-1856	8BR2111	Electrical Equipment Building No.4	Space Shuttle Program	Eligible, C
J8-1703	8BR2103	Slidewire Termination Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J8-1707	8BR2104	Water Chiller Building	Apollo Program Space Shuttle Program	Listed, C Eligible, C

Facility Number	*Site File Number*	*Facility Name*	*Associated Programs*	*Listed, Eligible, Individual (I), or Contributing (C) Resource*
	8BR1686	**Launch Complex 39A Historic District (continued)**	Apollo Program Space Shuttle Program	Listed, I, C Eligible, I, C
J8-1610	8BR2108	Water Tank	Space Shuttle Program	Eligible, C
J8-1611	8BR2109	Flare Stack	Space Shuttle Program	Eligible, C
J8-1906	8BR2113	Hypergol Fuel Facility	Space Shuttle Program	Eligible, C
J8-1862	8BR2112	Hypergol Oxidizer Facility	Space Shuttle Program	Eligible, C
J8-1564	No BR #	Foam Building	Apollo Program	Listed, C
J8-1565	No BR #	Pump House	Apollo Program	Listed, C
J8-1659	No BR #	Compressed Air Building	Apollo Program	Listed, C
J8-1753	No BR #	Remote Air Intake Building	Apollo Program	Listed, C
J8-1858	No BR #	Azimuth Alignment Station	Apollo Program	Listed, C
	8BR1687	**Launch Complex 39B Historic District**	Apollo Program Space Shuttle Program	Listed, I, C Eligible, I, C
J7-337	8BR2010	Launch Complex 39B	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-132	8BR2114	B-1 Operations Support Building	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-243	8BR2122	B-2 Operations Support Building	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-140	8BR2115	High Pressure GH2 Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-182	8BR2116	LOX Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-191	8BR2118	Camera Pad B No. 1	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-342	8BR2124	Camera Pad B No. 2	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-589	8BR2127	Camera Pad B No. 3	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-584	8BR2126	Camera Pad B No. 4	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-183	8BR2117	Camera Pad B No. 6	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-192	8BR2119	LH2 Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-241	8BR2121	Electrical Equipment Building No. 1	Apollo Program Space Shuttle Program	Listed, C Eligible, C

Facility Number	*Site File Number*	*Facility Name*	*Associated Programs*	*Listed, Eligible, Individual (I), or Contributing (C) Resource*
	8BR1687	**Launch Complex 39B Historic District (continued)**	Apollo Program Space Shuttle Program	Listed, I, C Eligible, I, C
J7-231	8BR2120	Electrical Equipment Building No. 2	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-331	8BR2123	Slidewire Termination Facility	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-240	8BR2128	Flarestack	Space Shuttle Program	Eligible, C
J7-385	8BR2125	Water Chiller Building	Apollo Program Space Shuttle Program	Listed, C Eligible, C
J7-288	8BR2129	Water Tank	Space Shuttle Program	Eligible, C
J7-242	No BR #	Foam Building	Apollo Program	Listed, C
J7-338	No BR #	Compressed Air Building	Apollo Program	Listed, C
J7-537	No BR #	Azimuth Alignment Station	Apollo Program	Listed, C
J7-432	No BR #	Remote Air Intake Building	Apollo Program	Listed, C
	8BR1986	**Shuttle Landing Facility Historic District**	Space Shuttle Program	Eligible, I, C
UK-027	8BR1987	Shuttle Runway	Space Shuttle Program	Eligible, I, C
J6-2313	8BR1988	Landing Aids Control Building	Space Shuttle Program	Eligible, I, C
	8BR1990	**Orbiter Processing Historic District**	Space Shuttle Program	Eligible, I, C
K6-894	8BR1991	Orbiter Processing Facility High Bay 1 and 2	Space Shuttle Program	Eligible, I, C
K6-696	8BR1992	Orbiter Processing Facility High Bay 3 (includes the Space Shuttle Main Engine Processing Facility	Space Shuttle Program	Eligible, I, C
K6-794	8BR1994	Thermal Protection System Facility	Space Shuttle Program	Eligible, I, C
	8BR1996	**Solid Rocket Booster (SRB) Disassembly and Refurbish-ment Complex Historic District**	Space Shuttle Program	Eligible, C
66250	8BR2001	Hangar AF	Space Shuttle Program	Eligible, C
66251	8BR2002	High Pressure Gas Facility	Space Shuttle Program	Eligible, C
66240	8BR2003	High Pressure Wash Facility	Space Shuttle Program	Eligible, C
66310	8BR2006	SRB Paint Building	Space Shuttle Program	Eligible, C
66249	8BR2008	Thrust Vector Control Deservicing Building	Space Shuttle Program	Eligible, C

Facility Number	*Site File Number*	*Facility Name*	*Associated Programs*	*Listed, Eligible, Individual (I), or Contributing (C) Resource*
	8BR1996	**Solid Rocket Booster (SRB) Disassembly and Refurbishment Complex Historic District (continued)**	Space Shuttle Program	Eligible, C
66340	8BR2009	Multi-Media Blast Facility	Space Shuttle Program	Eligible, C
	8BR2932	**NASA KSC Railroad System Historic District**	Space Shuttle Program	Eligible, C
UK-022	8BR2931	Railroad Track	Space Shuttle Program	Eligible, C
H2-1198	8BR2906	Jay Jay Bridge	Space Shuttle Program	Eligible, C
NLAX170	8BR2908	70-Ton Aft Skirt Car	Space Shuttle Program	Eligible, C
	8BR3073	**NASA-owned Cape Canaveral Air Force Station Industrial Area Historic District***		
1728	8BR3069	Hangar N	Space Shuttle Program	Eligible, C
54928	8BR2190	Little N Storage Building	Space Shuttle Program	Eligible, C
55005	8BR2972	Hangar M Annex	Space Shuttle Program	Eligible, C
60540	8BR2977	Solar Array Test Building	Expendable Launch Vehicle Program	Eligible, C
60680	8BR2976	Missile Assembly Building AE	Expendable Launch Vehicle Program	Eligible, I, C
1726	8BR3070	Hangar S	Project Mercury	Eligible, I, C
		*Hangar AF Complex is also contributing to the historic district	Space Shuttle Program	Eligible, C

APPENDIX C
Undertakings that Do Not require Consultation with the SHPO

The listed categories below are determined to have no adverse effects on existing or future listed or eligible historic properties and/or structures. Therefore, upon reviewing any proposed action to a property and/or structure on NASA-KSC, if the action falls into one or more of these categories, NASA-KSC may proceed with their proposed project without public notification or consultation from the SHPO and/or the ACHP.

1. Antiterrorism and Force Protection Measures: Antiterrorism and force protection measures designed and constructed to prevent or mitigate hostile actions, including cyber threats, as well as to increase capacity and protection for access control, provided such construction does not alter or detract from the qualities that contribute to the significance of the historic property and/or structure. Any ground disturbing activities proposed shall comply with Stipulation VI.

2. Building Maintenance and Repair: General maintenance and repair of buildings and facilities, which includes, but is not limited to, painting, siding, roofing, door, ceiling, wall, window, floor covering repair/replacement, elevator repair, filter and light replacement, and repairs to existing equipment. If historic fabric must be replaced, it should be in-kind and match as practicable to the configuration, material, size, detail, and construction of the historic fabric as called for in the *Secretary of the Interior's Standards for Rehabilitation.*

3. Building Removal: Demolition of buildings, structures, or facilities that are either not listed on or eligible in Appendix B or do not contribute to the significance of those historic properties, whether or not they lie within an historic district.

4. Electrical: Maintenance, repair, removal, modification, upgrading, or replacement of plant and building electrical systems (e.g., building conduit, wiring and lighting, emergency lighting, etc.) in all NASA-KSC buildings and structures. Upgrading or additional new electrical lines between or among buildings within historic districts listed or determined eligible on the NRHP under Criteria A, B, or D.

5. Energy Conservation: Energy conservation measures, including installation, replacement, or modifications to the heating, ventilation, and air condition control systems and conversions to alternative fuels, provided that these elements do not detract from the qualities that make the historic property listed or determined eligible.

6. Erosion Control: Erosion control activities, such as gravel or riprap placement on slopes, planting or seeding ground cover, or cleanout of existing drainage ditches.

7. Facility Removal or Replacement: Removal or replacement of existing nonhistoric equipment or facility components where the equipment or component

APPENDIX C
Undertakings that Do Not require Consultation with the SHPO (continued)

itself is not a feature which contributes to the historic significance of the historic property(ies) identified in Appendix B.

8. Fencing: Maintenance of existing fencing and installation of a new chain-link or post and rail fencing.

9. Fire Detection and Suppression: Changes to fire detection and suppression systems, including routine upgrades and modifications to fire alarm systems, smoke detectors, and sprinkler systems.

10. Green Building Technologies: Incorporation of green building technologies to existing buildings seeking certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design standards for environmentally sustainable construction, provided such construction does not alter or detract from the qualities that contribute to the significance of the historic property(ies).

11. Health and Safety: Health and safety activities, including cleanup, encapsulation, and removal and disposal of asbestos-containing materials and lead paint from buildings and structures.

12. Hurricane Modifications: Modifications necessary to comply with hurricane codes, provided the changes do not alter or detract from the qualities that contribute to the significance of the historic property(ies).

13. Landscaping: Landscaping, including mowing and trimming of grass, shrubs, or trees and routine vegetation already covered under control activities.

14. Lighting: Changes to interior and exterior lighting systems, including replacement of, or modification to, lighting systems in all buildings and facilities.

15. New Building Construction: New construction within historic districts listed or determined eligible for listing on the NRHP under Criteria A and B, provided such new construction does not directly impact or alter contributing resources as called for in the *Secretary of the Interior's Standards for Rehabilitation.*

16. Parking: Parking lot maintenance and repair of existing lots. Temporary parking or placement of mobile homes, tents, and portable structures on extant parking lots or other surfaces that does not require new ground disturbance.

17. Retrofitting: May include siting, installation, maintenance, repair, removal, or replacement of communications and computer systems, including public address

APPENDIX C
Undertakings that Do Not require Consultation with the SHPO (continued)

systems, facsimile systems, microwave and radio systems, fiberoptic cables, and phone systems.

18. Roads: Routine road maintenance and resurfacing where work is confined to previously maintained surfaces, ditches, culverts, and cut and fill slopes where there are no known historic properties or where properties would not be affected because proposed work is clearly within disturbed context. Also included are paving extant roads or parking lots, or placing marl or shell on dirt roads or lots; small-scale road, sidewalk, and parking lot repair; and adding rock fill or gravel to roads where no new ground disturbance will occur.

19. Signage: Placement of signage and public interpretation, including the use of interpretive signs or exhibit structures that do not visually intrude on the historic property (ies).

20. Temporary Facilities: Construction or siting of temporary structures and sheds that does not physically affect historically significant properties or involve new ground disturbance.

21. Transfer of Real Estate: Transfer of ownership or management responsibilities of real property, including those listed or determined eligible in Appendix B, to be managed by another Federal agency with equal responsibility for complying with Sections 106 and 110 of the NHPA.

22. Water Systems: Changes to water systems, including siting, installation, maintenance, repair, removal, and operation of plant water systems that include, but are not limited to, water wells, cooling water systems, potable water systems, storm sewers, waste water treatment systems, plant drainage, and plumbing.

APPENDIX D
DEFINITIONS

Adverse Effect: An undertaking is considered to have an adverse effect on a resource when it may diminish the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties may include, but are not limited to, physical destruction, damage, or alteration to all or part of a resource; isolation of the resource from, or alteration of, the character of the resource's setting when that character contributes to the resource's qualification for the National Register; introduction of visual, audible, or atmospheric elements that are out of character with the resource or its setting; neglect of a resource resulting in its deterioration or destruction; and the transfer, lease, or sale of the resource.

Advisory Council on Historic Preservation (ACHP): An independent agency created by Title II of the National Historic Preservation Act (NHPA), 16 U.S.C. Section 470i. The review process established by NHPA Section 106, 16 U.S.C Section 470f, is conducted according to regulations issued by the ACHP, 36 CFR Part 800, as authorized by 16 U.S.C. Section 470s.

Agreement Document: Legal document resulting from Section 106 consultation which obligates the signing parties to fulfill their Section 106 responsibilities by carrying out its terms. Three kinds of agreement documents include Agreement-based Determinations of No Adverse Effect, Memoranda of Agreement, and Programmatic Agreements.

Comment: The findings and recommendations of the ACHP formally provided in writing to the head of the agency under Section 106.

Compatible Material: Material that is in harmony or like in kind.

Consultation: The process of seeking, discussing, and considering the views of other participants, and where feasible, seeking agreement with them regarding matters arising in the Section 106 process. The *Secretary of the Interior's Standards and Guidelines for Federal Agency Preservation Programs* pursuant to the NHPA provide further guidance on consultation.

Contributing Resource: A building, structure, or object that adds to the historic associations or historic engineering or architectural qualities for which a property is significant because either it was present during the period of significance, relates to the documented significance of the property, and posses historic integrity or is capable of yielding important information about the period, or it independently meets the NRHP criteria.

Day: Calendar days.

Effect: Alternation to the characteristics of a historic property qualifying it for listing or eligible on the National Register.

APPENDIX D
DEFINITIONS (continued)

Eligible: Properties that meet the National Register criteria as determined by regulations of the Secretary of Interior.

Historic American Building Survey/Historic American Engineering Record (HABS/HAER): Heritage Documentation Program administers HABS, the Federal Government's oldest preservation program, and companion programs HAER, Historic American Landscapes Survey, and Cultural Resources Geographic Information Systems. Documents produced through the programs constitute the Nation's largest archive of historic architectural, engineering, and landscape documentation.

Historic Period: The period after the advent of written history in a geographic region. In Florida, the historic period began in the early 1500s with the arrival of Europeans.

Historic District: A district possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. All resources within the district are either contributing or non-contributing.

Historic Property: Any prehistoric or historic district, site, building, structure, or object listed or determined eligible for inclusion on the NRHP maintained by the Secretary of the Interior, includes artifacts, records, and remains that are related to and located within such properties. Also includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meets the National Register criteria.

Historic Setting: A group of facilities and/or structures that follow the same guidelines such as architectural style, functional purpose, or timeline.

Identification: The inventory of all historic properties within a project area of potential effects. This is accomplished through archaeological and historic structures surveys.

Integrity: The authenticity of a historic property's identity, evidenced by the survival of physical characteristics that existed during the resource's historic or prehistoric period. The seven aspects of integrity are location, design, setting, materials, workmanship, feeling, and association.

Memorandum of Agreement (MOA): An agreement document that is prepared when an undertaking will have adverse effects on those characteristics of an historic property that qualify it for the National Register that embodies the ways to reduce, avoid, minimize, or mitigate such effects decided by the consulting parties. A three-party MOA is signed by the Federal agency, the SHPO, and the ACHP; a two-party MOA is when the ACHP has not been involved in the consultation but receives the MOA after the Federal agency and SHPO/THPO has executed it.

APPENDIX D
DEFINITIONS (continued)

Mitigation: A remedy or offset to an adverse effect or a change in an historic property's qualifying characteristics that diminish its integrity. Treatment is the act of mitigating those effects, or how one goes about implementing the mitigation measure(s) agreed upon in consultation. Thus, a mitigation plan for the undertaking may contain several treatment plans, one for each property being adversely affected. Data recovery is a common archaeological mitigation measure that, through implementation of a treatment plan, retrieves the important information present within an archaeological site that makes it eligible before the site's integrity is compromised or destroyed. Mitigation can include compilation of documentation such as as-built drawings and site plans, photo documentation (HABS/HAER), development of Web sites, models, public interpretations, reports/pamphlets, written history narrative, data recovery, salvage of artifacts, and/or oral interviews.

Multiple Assets: Multiple copies of assets of a specific property type (e.g., three Mobile Launcher Platforms, two Payload Canisters, two Launch Pads A and B, and two Crawler Transporters) that are ninety-five (95) percent identical.

National Historic Landmark (NHL): A historic property evaluated by the National Park Service and found to have significance at the national level and designated as such by the Secretary of the Interior. NHLs are properties listed in the National Register that have national significance in American history. NHLs are considered to be the most important historic properties in the United States, along with our national parks.

National Historic Preservation Act (NHPA): The National Historic Preservation Act of 1966, as amended (Public Law 89-665; 16 U.S.C. 470 et seq.), is the legislation that created the NRHP, the list of NHLs, the ACHP (giving it authority to issue regulations implementing Section 106) and the posts of State and Tribal Historic Preservation Officers with the intent to preserve historical properties.

National Park Service: The National Park Service (NPS), a bureau in the Department of the Interior, was created by Congress in August 1916. NPS preserves, unimpaired, the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. NPS also administers the National Historic Landmarks (NHL) Program.

National Register Criteria: The criteria established by the Secretary of the Interior for evaluating the eligibility of properties for inclusion on the National Register (36 CFR Part 60).

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

APPENDIX D
DEFINITIONS (continued)

No Adverse Effect: An undertaking that does not affect those characteristics of an historic property that qualifies it for the NRHP. A determination of No Adverse Effect can be determined in one or two ways: either the nature of the project itself is not harmful or the harmful effects are mitigated through preservation covenants, the retrieval of important information through data recovery, or by following the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.

Noncontributing Resources: A building, site, structure, or object that does not add to the historic engineering or architectural qualities or historic associations for which a property is significant because it was not present during the period of significance; it does not relate to the documented significance of the property; due to alterations, disturbances, additions, or other changes, it no longer possesses historic integrity or is capable of yielding important information about the period; or it does not independently meet the NRHP criteria.

Programmatic Agreement (PA): A PA is a type of agreement document that records the terms and conditions agreed upon to resolve the potential adverse effects of a Federal agency program, complex undertaking, or other situation in accordance with Subsection 800.14(b) of the ACHP's regulations implementing Section 106.

Rehabilitation: The act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient, contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

Restoration: The act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

Rural Historic Landscape: A geographic area that historically has been shaped or modified by human activity, occupancy, or intervention and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features.

Secretary: The Secretary of the Interior acting through the Director of the National Park Service, except where otherwise specified.

Secretary's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716-44742): Technical information about archaeological and historic preservation activities and methods. The Standards and Guidelines are prepared under the authority of Section 101(f), (g), and (h), and Section 110 of the NHPA of 1966, as amended.

APPENDIX D
DEFINITIONS (continued)

Section 106: Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the ACHP a reasonable opportunity to comment on such undertakings. The Section 106 process seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties, commencing at the early stages of project planning. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

Significant: A prehistoric or historic district, site, building, structure, or object meeting one or more of the Criteria for Evaluation used in considering National Register of historic property eligibility. Significance is achieved through association with events or important persons, distinctive physical characteristics, or the potential to yield important information.

State Historic Preservation Officer (SHPO): The official appointed or designated pursuant to Section 101(b)(1) of the NHPA to administer the historic preservation program or a representative designated to act for the SHPO.

Structure: Those functional constructions made usually for purposes other than creating human shelter and used to distinguish the difference from buildings.

Undertaking: A project, activity, or program, funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval. NASA-KSC's operations and oversight of contractor operations are undertakings because they are Federal activities and they have the potential to affect historic properties.