Memorandum of Agreement
Among the Federal Aviation Administration,
The National Aeronautics and Space Administration,
The Ohio State Historic Preservation Officer and
The Advisory Council on Historic Preservation
Regarding
Proposed Development at Cleveland Hopkins International Airport,
Cuyahoga County, Ohio

WHEREAS, the Federal Aviation Administration (FAA) has determined that its approval of changes to the proposed Airport Layout Plan (ALP) and associated development actions for the Cleveland Hopkins International Airport (Airport), may have an adverse effect on the Rocket Engine Test Facility (RETF), a National Historic Landmark, and other properties which are listed in or eligible for inclusion in the National Register of Historic Places (NRHP); and

WHEREAS, the National Aeronautics and Space Administration (NASA) may transfer the land at the Glenn Research Center (GRC) which contains the RETF to the Airport; and

WHEREAS, NASA, FAA and the City of Cleveland (City) agree that there is no acceptable new location within the Glenn Research Center (GRC) for the RETF in its entirety; and

WHEREAS, the City plans to demolish the RETF as part of the proposed ALP; and

WHEREAS, on October 6, 1989, NASA, the Advisory Council on Historic Preservation (Council) and the National Conference of State Historic Preservation Officers (NCS.HPO) executed a Programmatic Agreement (PA) regarding research, development, space mission operations and management use of its facilities which have been designated National Historic Landmarks; and

WHEREAS, NASA initiated consultation with the Ohio State Historic Preservation Office (SHPO) pursuant to Stipulation II of the 1989 PA; and

WHEREAS, FAA, as the lead Federal Agency, pursuant to 36 CFR § 800.2(a) (2), has consulted; with the Ohio SHPO and the Council pursuant to the regulations implementing Section 106 (36 CFR Part 800) of the National Historic Preservation Act (NHPA; 16 U.S.C. 470(f)); and

WHEREAS, in accordance with 36 CFR § 800.10(c), FAA has notified the Secretary of the Interior (SOI) of the consultation involving the RETF and invited the SOI to participate in consultation; and

WHEREAS, the National Park Service/Midwest Regional Office, National Historic Landmarks Program has participated in consultation; and

WHEREAS, the City of Cleveland (City) is the operator of the Airport and has been invited to be a signatory to this Memorandum of Agreement (MOA); and
WHEREAS, the City of Olmsted Falls, the City of Brook Park, and Olmsted Township (Local Governments) have participated in this consultation and have been invited to concur in this MOA; and

WHEREAS, FAA, the Council, the Ohio SHPO, the City of Olmsted Falls and the City of Cleveland executed a PA on October 10, 2000 to take into account the effects of the Airport's current and future sound insulation measures implemented as part of the Airport's Noise Compatibility Program (Program), as approved by FAA under 14 CFR 150;

NOW, THEREFORE, the FAA, NASA, Ohio SHPO, the Council and the City agree that the proposed undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on affected historic properties.

STIPULATIONS

FAA will ensure that the following measures are carried out:

I. Scope and Responsibility

A. The City will manage, fund and implement the following stipulations. The City will reimburse NASA for the NASA portion of the work pursuant to an agreement between the City and NASA. It is anticipated that the NASA/City agreement will be executed within four months of the execution of this MOA.

B. The Area of Potential Effect (APE) includes the following:

1. Areas where historic properties could be physically affected by construction activities;

2. Areas where historic properties would be newly affected by noise levels greater than 65 DNL compared to the No-Build/No-Action alternative studied during project planning; and

3. Areas where historic properties would be exposed to an increase of 1.5 dB within the 65 DNL noise contour of the preferred action.

C. In consultation with the Ohio SHPO and the City, FAA has identified the following affected historic properties within the APE:

1. RETF NHL which is composed of GRC Bldgs 202, including test stands A and B and associated facilities, 205, 206, 206A and 100, and an observation blockhouse.
2. St Patrick School - Rocky River Road and Puritas Avenue;
3. Grasella House -16701 Laveme Avenue; and

II. Documentation

A. At the request of FAA and the City, NASA proposes to transfer ownership of the land to the City that contains the RETF, a National Historic Landmark (NHL), and may contain another historic property.

B. Documentation of the RETF National Historic Landmark

1. Prior to the relocation, dismantling, disposal, or demolition of the RETF, the City shall ensure that the NHL is recorded to the following standards.

   a. The City shall record the RETF NHL to the standards set by the Historic American Engineering Record (HAER). The City will contact HAER to determine the appropriate level of documentation and level of involvement "of HAER staff.

   b. NASA shall provide the City with access to its records and other holdings regarding the RETF to assist the City in the HAER recordation.

   c. The City shall conduct documentation in accordance with HAER standards and the methods described in the Secretary of the Interior's Standards for Architectural and Engineering Documentation" (Federal Register, 48 FR 190, pp. 44730-44734, September 29, 1983).

   d. The documentation shall be completed by the City and approved by HAER before the RETF is relocated, dismantled, disposed or demolished, and prior to the start of any construction on the RETF complex, but not later than September 30, 2001.

   e. The City shall provide original copies of all documentation to the SOI, in accordance with the Standards, for incorporation into the National Architectural and Engineering Records (NAER) in the Library of Congress, as provided in Section 101 of NHPA. The City shall submit two copies each of the documentation to the NASA GRC, the Ohio SHPO, the Cleveland Landmarks Commission, and the NASA Headquarters (HQ), Office of History.

2. In consultation with NASA and the SHPO, the City shall develop a scope of work and schedule for implementation of the following measures;
a. Photograph the existing condition of the RETF, as needed, and catalog the photographs, videotapes, films and written records which describe the RETF and its context.

b. Videotape interviews of persons who worked in the RETF and associated research programs within the transferred land during the period of significance of the RETF. The City will transcribe the interviews into a written document, and obtain releases for both the written and video interviews.

c. Prepare a comprehensive peer-reviewed, history of the RETF, its research programs, and contribution to human space flight (covering its role in rocket technology programs, the Apollo missions, the Advanced Space Shuttle, Orbit Transfer Vehicles and Space Station Project). The City will submit a master copy (one printed and one in Microsoft Word format) and up to 1,000, copies for distribution to NASA GRC.

d. Prepare a web-based presentation on the RETF, its research programs, and contribution to human space flight incorporating photographs, video clips, and written materials for display through the NASA website.

e. Produce a five minute and a twenty minute videotape programs covering the history of the RETF, its research programs, and contribution to human space flight. Provide up to 100 copies of each tape for distribution.

f. Renovate NASA's existing 3-dimensional, scale model of the RETF. At a minimum the renovation shall include a thorough cleaning of the model, repair of loose components, application of new graphic labels, and an installation of a new frame and cover. No additions are to be made to the model.

g. Prepare a museum quality display, incorporating the five minute video history, display boards, the written history and the 3-dimensional scale model of the RETF. The City will submit the final display to NASA GRC which shall become the owner of the display. NASA proposes to exhibit the display at the NASA GRC Visitor Center or, if space is not available at the Visitor Center, another appropriate location.

3. In developing and implementing the scope of work for the measures listed in Stipulation II.B.2, the City shall consult with the individuals and organizations listed in Attachment A.
4. The City shall submit the scope of work and schedule for implementation to NASA and SHPO for review and acceptance. NASA and the SHPO shall have thirty (30) working days from receipt for review of each submittal. The City shall have an accepted scope of work on or before January 1, 2001. When NASA and the SHPO have accepted the scope of work and schedule, the City shall implement that scope of work according to the schedule.

5. NASA GRC, NASA HQ Office of History and the SHPO will monitor the preparation of the products listed in Stipulation ELB.2 in order to ensure their quality.

6. The City shall submit draft and final products to NASA and SHPO for review and approval. NASA and the SHPO shall have thirty (30) working days from receipt for review of each submittal. At the close of the review period, the City will consider the products submitted to NASA and the SHPO to be approved, if no comments are provided to the City, unless the City, SHPO and NASA mutually agree in writing to an extension of the review period.

7. The City shall seek the comments of the parties listed in Attachment A on any draft product and will address any comments received in the final product. Any party listed in Attachment A who provides comments will receive a copy of the final product.

8. The City shall submit two copies each of the final products in Stipulations II.B.2.a, b, c and e to NASA GRC, the SHPO, and NASA HQ Office of History.

9. If the City determines that one of the measures listed in Stipulation 3I.B.2 cannot practically be completed as described and according to the accepted schedule, then the City may substitute additional mitigation measures with the written consent of NASA, FAA, NPS, the Council and the Ohio SHPO.

10. NASA has identified acceptable sites within the GRC for the City to relocate portions of the RETF for reuse. NASA will provide the SHPO with an opportunity to review and comment on the plans for the proposed relocation and reuse.

11. Following demolition, NASA shall complete the process for de-listing the RETF complex and consult with the SHPO, in accordance with 36 CFR § 800,4( c) to determine the eligibility of any remaining portions or parts of the NHL.
C. High Load Tensile Strength Machine

1. Prior to the transfer of NASA property to the City, NASA shall submit appropriate documentation to the Keeper of the NRHP, in accordance with 36 CFR § 800.4(c)(2) to determine if the Machine (located in GRC Building 204) is eligible for listing in the NRHP.

2. If the Keeper finds that the Machine is not eligible for listing in the NRHP, then no further review or action under the terms of this MOA is required.

3. If the Keeper finds that the Machine is eligible for listing in the NRHP, then before the Machine is dismantled, relocated, disposed or demolished, the City will complete the following documentation.

   a. The City will record the Machine to the standards set by HAER. The City will contact HAER to determine the appropriate level of documentation. The City shall conduct documentation in accordance with HAER standards and the methods described in the Secretary of the Interior's Standards for Architectural and Engineering Documentation" (Federal Register, 4.8 FR 190, pp. 44730-44734, September 29, 1983). NASA shall provide the City with access to its records and other holdings to assist the City with documentation. The documentation shall be completed by the City and approved by HAER before the Machine is relocated, dismantled, disposed or demolished, and prior to the start of any construction at the Building 204 site.

   b. The City will prepare a catalogue of photographs of the Machine and produce a videotaped interview of the person who developed the Machine. NASA GRC, NASA HQ, Office of History and the SHPO will monitor the development and preparation of these products.

   c. The City will submit two copies each of this documentation to the Ohio SHPO, the Cleveland Landmarks Commission, the NASA GRC, and the NASA HQ Office of History.

III. Salvage and Curation

A. NASA will salvage any equipment/artifacts of the historic property(ties) that are determined by NASA to be of service to NASA.
B. Prior to their relocation, dismantling, disposal or demolition, the City, in consultation with NASA, the SHPO and the parties in Attachment A, shall create a list of the significant features of former NASA historic property (ies) that could be offered for duration. The City will ensure that these features are removed and stored in a manner that minimizes damage until such time as curation or loan agreements are executed or the City and the SHPO agree that the City may dispose of the features. The City shall seek SHPO approval of the proposed interim curation measures.

C. The City will first offer NASA the opportunity to display features for interpretation at GRC or another NASA facility.

1. If NASA declines, then NASA with the assistance of the City will next notify the Smithsonian Institution of the availability of the listed features for curation by providing the list and if requested, photographs.

2. If the Smithsonian elects not to accept any or all of the listed features, then the City shall offer to convey the features to a regional or local repository for permanent curation. These institutions may include, but are not limited to, the John and Annie Glenn Museum Foundation, the Neil Armstrong Air & Space Museum, and Wright Patterson Air Force Base Museum. NASA and SHPO will assist the City in compiling the list of appropriate repositories.

3. The City may provide up to the cost of demolition to assist the Smithsonian or another repository in removal and relocation.

4. The City will complete its identification and transfer to an appropriate repository before demolition of the RETF or the Machine.

5. In the event that the City can find no repository(ies) for the permanent curation of all of the significant features, then the City may dispose of the features after notifying NASA and the SHPO.

IV. Other Measures

A. The disposition of artifacts resulting from NASA's transfer of the land at GRC to the City will occur in accordance with NASA Procedures and Guidelines NPG: 4310.1, "Identification and Disposition of NASA Artifacts" and Appendix A, a curation agreement between NASA and the Smithsonian Institution.

B. The disposition or disposal of NASA personal property resulting from this land transfer will

C. **Interim Protection** - The City shall ensure that the historic property(ies) slated for treatment in accordance with Stipulation II, IH and IV of this MOA are protected against damage until those measures have been implemented.

**V. Sound Attenuation Measures**

A. In Olmsted Falls, Olmsted Township, and Brook Park, there are a number of historic (residential) properties located within the 65 DNL that will remain within the 65 DNL with or without the proposed ALP Development. Residential properties that are located within the 65 DNL noise contour are eligible for Federally assisted sound insulation through participation in the Noise Compatibility Program (Program) and will be treated under the terms of the October 10, 2000, PA.

B. The following historic properties - St. Patrick's School, and 16701 Laveme - will also be eligible for Federally funded sound insulation through the Program, but only as a direct result of activities that are part of the proposed ALP Development. They will also be treated under the terms of the October 10, 2000 PA.

C. If the PA for the Program is not in effect at the time that any of the properties listed in this stipulation are proposed for sound insulation, then FAA and the City shall comply with 36 CFR 800 for each sound insulation project.

**VI. Noise**

A. **Committee** - The City will continue to convene the Planning Advisory Committee (PAC) which was originally established for the FAR Part 150 Study Update. The City will also establish a Historic Preservation Subcommittee composed of itself, the Cities of Olmsted Falls and Brook Park, and Olmsted Township, and may invite other members of the PAC, as appropriate, to sit on the Subcommittee. The City shall also invite NASA to participate as a member of the Subcommittee.

1. The PAC will continue its charge to review noise issues, Airport land use and program management measures. Issues which may be considered by the subcommittee include the implementation of community noise monitoring, review of noise data, development of
measures that could minimize the need for sound attenuation of historic properties, recommendations for ways of improving communication between the Airport and local communities, identification of measures to implement educational programs relative to historic properties in the airport area.

a. The Ohio SHPO and the Council shall provide technical assistance on historic preservation issues to the PAC and its subcommittee upon request.

b. The FAA shall provide technical assistance to the PAC and Subcommittee on issues related to federal aviation requirements affecting the Airport, upon request.

2. By December 31, 2000, the City will develop an updated structure and procedures for the PAC, procedures for the subcommittee, and announce a regular meeting schedule. The City shall also provide minutes from the meetings to SHPO and FAA.

3. The subcommittee shall file a quarterly report with the PAC, FAA and the SHPO, summarizing the issues that it has considered, its major activities and any recommendations that have been presented for consideration by the PAC.

4. The City shall respond to formal recommendations and requests from the PAC in writing, conveying to the PAC how its views are being taken into account. A representative from the City shall appear before the PAC to discuss issues of concern to its member relative to Airport planning and management issues, at the Committee's request.

5. In order to provide for full consideration of noise issues relative to the proposed Airport development, the City will continue the activities of the PAC and Subcommittee until at least December 31, 2005.

6. One year after the proposed ALP expansion has been completed, the FAA and the City agree to conduct another FAR Part 150 Study Update. At the inception of the study update and at key milestones of the study, the City will consult with the PAC and the Subcommittee to identify any additional measures needed to further mitigate noise & other effects on historic properties within the 65 DNL contour, while taking into account the required safety and operational needs of the Airport. The study milestones will be at a minimum, the study initiation meeting, the conclusion of the data gathering phase, the preparation of the alternatives analysis, and the issuance of the preliminary draft and draft final study reports.
B. Monitoring

1. On a quarterly basis, the City agrees to consult with the City of Olmsted Falls regarding a schedule for the use and placement of portable noise monitors within the Olmsted Falls Historic District. The City of Olmsted Falls may request that the City allow alterations to this schedule if residents report unusually high noise levels that warrant additional monitoring. The City may also propose to the City of Olmsted Falls that additional permanent monitors should be installed within the Historic District to provide reliable, long-term data on noise within this area.

2. The City will routinely provide all sound monitoring data and any available analyses of said data to the Local Governments, the PAC and its Historic Preservation Subcommittee, and local public libraries for review and consideration. The purpose of this stipulation is to allow comparison of data to the predicted noise contours, so that any unnecessary adverse effects to historic properties resulting from sound attenuation might be avoided.

VI. Previously Unidentified Historic Resources or Effects

A. When previously unidentified properties are discovered or unanticipated effects to historic properties are identified during implementation of the Project, the Airport will immediately cease work in that area, and notify FAA and SHPO within five business days. FAA will consult with the SHPO and the other parities to this MOA, in accordance with 36 CFR § 800.4 and § 800.5, to determine if historic properties will be adversely affected.

B. When FAA and the SHPO concur that historic properties will be adversely affected, then they shall consult to develop and implement appropriate treatment. If they cannot agree the matter shall be resolved in accordance with Stipulation VIII.

VII. Administration

A. Professional Standards: The City shall ensure that all work undertaken under the terms of this MOA is carried out by or under the direct supervision of a person or persons meeting at a minimum the Secretary of the Interior's Professional Qualifications Standards in architecture or architectural history (Appendix A 36 CFR Part 61).
B. Schedule: If the City determines that it cannot meet one of the deadlines established under the terms of this MOA, the City shall then consult with FAA, the SHPO and the Council to consider an extension. The City may proceed once it has obtained the written agreement of the FAA, the SHPO and the Council to the proposed extension.

VIII. Dispute Resolution

A. Should the Ohio, SHPO, NASA, the Airport, or the City object within thirty (30) days to any plans, specifications or recommendations submitted pursuant to the terms of this MOA or to the manner in which this MOA is being implemented, then they must submit written notice of that objection to FAA. FAA shall then consult with the objecting party and the SHPO, NASA, the City and the Airport as appropriate, to resolve the objection. If FAA determines that the objections(s) cannot be resolved, then FAA shall forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

1. Provide FAA with recommendations which FAA will take into account in reaching a final decisions regarding the dispute, or

2. Notify FAA that it will comment pursuant to 36 CFR § 800.7 (c) and proceed to comment.

B. This requirement shall be applicable only to the matter which is the subject of the unresolved objection. The FAA agrees that its responsibility to carry out all other actions provided for under this PA, not the subject of an unresolved objection, will remain unchanged.

C. At any time during the implementation of this MOA, should an objection to any such measure of its manner if implementation be raised by a member of the public, FAA shall take into account the objection and consult with the objecting party, and the Ohio SHPO, NASA, the City or the Airport, and the Council, as appropriate.

IX. Amendment

A. Any signatory to this MOA may propose to the other parties that it be amended whereupon the parties will consult in accordance with 36 CFR § 800.6(c)(7) to consider such an amendment.

B. Any resulting amendment shall be developed and executed among FAA, the Council, the Ohio SHPO, NASA, and the City in the same manner as this MOA.
X. Termination

A. FAA, NASA, the Council, the Ohio SHPO, or the City may terminate this MOA by providing written notice to the other parties explaining the reasons for termination, then affording them at least thirty (30) days to consult to seek alternatives that would avoid termination.

B. Should consultation fail, the signatory proposing termination may terminate the MOA by notifying the other parties. Should the MOA be terminated, FAA shall either execute another MOA pursuant to 36 CFR § 800.6 or request the comments of the Council pursuant to 36 CFR § 800.7(c).

XI. Sunset Clause

A. The MOA will remain in effect until December 31, 2006 at which time the signatories will consult to determine if the terms of the MOA should be extended. If the signatories agree that the MOA should be extended, any extension shall be developed and executed among FAA, the Council, the Ohio SHPO, NASA, and the City in the same manner as this MOA.

EXECUTION of this Memorandum of Agreement and implementation of its terms constitutes evidence that FAA has afforded the OHPO; NASA; the Council; the Cities of Cleveland, Olmsted Falls, and Brook Park; and Olmsted Township an opportunity to comment on the facilities expansion at the Cleveland Hopkins International Airport in Cuyahoga County, Ohio and its effects on historic properties, and that FAA has taken into account the effects of the undertaking on historic properties.
SIGNATORIES:
FEDERAL AVIATION ADMINISTRATION

James Opatny, Acting Manager
Detroit Airports District Office

Date

OHIO HISTORIC PRESERVATION OFFICER

Amos Loveday
Ohio State Historic Preservation Officer

Date

ADVISORY COUNCIL ON HISTORIC PRESERVATION

John M. Fowler
Executive Director

Date

NATIONAL AERONAUTIC AND SPACE ADMINISTRATION

Samuel L. Vennari,
Associate Administrator for Aero-Space Technology

Date

CITY OF CLEVELAND

Mayor Michael White

Date

DEPARTMENT OF PORT CONTROL

Lavonne Sheffield-McClain
Director

Date
CONCURRING PARTIES:

CITY OF OLMSTED FALLS

Mayor Robert Blomquist

CITY OF BROOK PARK

Mayor Tom Coyne, Jr.

OLMSTED TOWNSHIP

Date