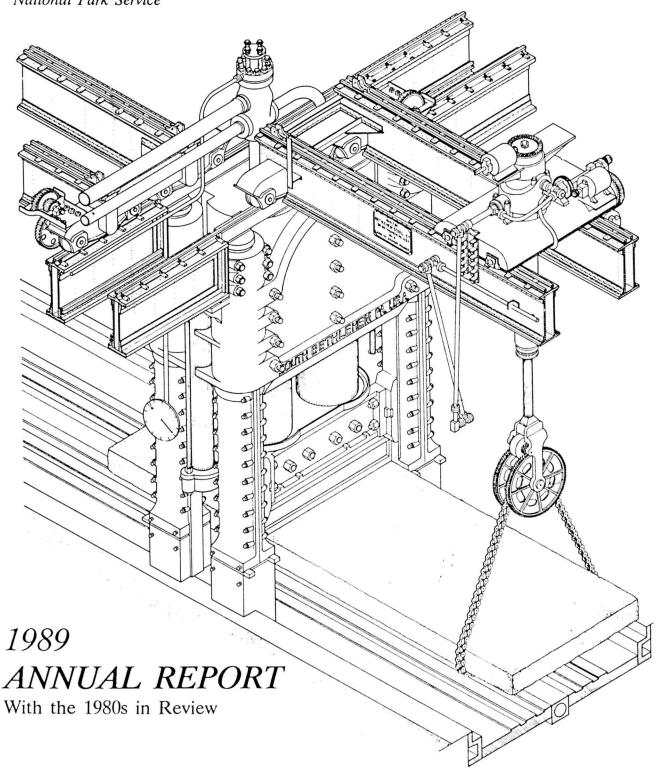
Historic American Buildings Survey/ Historic American Engineering Record

National Park Service



Architecture, engineering and technology have made important contributions to America's development. The Historic American Buildings Survey (HABS) and the Historic American Engineering Record (HAER) reflect the Federal Government's commitment to document, understand and, in some cases, preserve architectural, engineering and industrial sites that are important to our Nation's past. These programs conduct projects to document outstanding examples of this country's architectural, engineering and technological heritage. These projects produce measured drawings, written historical reports, and large format photographs which are made available to the general public through the Prints and Photographs Division, Library of Congress, Washington, D.C. 20540. Users of the HABS and HAER collections may contact the reference desk at 202-707-6399.

This report is a statement of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Division of the National Park Service for fiscal year 1989 (ending September 30, 1989). It does not reflect the accomplishments of the other members of the HABS and HAER tripartite agreement: the Library of Congress (Prints and Photographs Division), the American Institute of Architects, and the American Society of Civil Engineers.



Director
Deputy Director
Associate Director for Cultural Resources
Deputy Associate Director for Cultural Resources
Chief, HABS/HAER Division
Acting Deputy Chief, HABS/HAER
Chief, HAER
Principal Architect, HABS
Senior Historian, HABS

James M. Ridenour Herb Cables Jerry L. Rogers Rowland T. Bowers Robert J. Kapsch John A. Burns Eric N. DeLony Paul D. Dolinsky Kim Hoagland

National Park Service
U. S. Department of the Interior

ACKNOWLEDGEMENTS: This report was compiled by Jean P. Yearby and edited by Sara Amy Leach and Joseph D. Balachowski. The compiler wishes to also acknowledge the detailed review and recommendations of G. Gray Fitzsimons, John A. Burns, and Catherine C. Lavoie, as well as the many other contributors from the HABS/HAER staff.

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MESSAGE FROM THE CHIEF

This is the 1989 annual report of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Division, National Park Service. But it will also serve as a review of HABS/HAER during the turbulent decade of the 1980s.

I arrived at HABS/HAER early in 1980, when the continuance of these programs was very much in doubt. In fact, almost two-thirds of the resources assigned to HABS/HAER were lost during 1980. President Reagan assumed office in January 1981 on a platform of cutting civilian expenditures, increasing military expenditures, and decreasing taxes. Although some civilian programs were eliminated, most survived, albeit with reduced or static funding and staffing. For most programs, the 1980s were a no-growth period.

But for HABS/HAER, the 1980s saw great growth and development which resulted from reorganization of the program. From a low in 1980-81, our documentation was at record levels for most of the 1980s. The size of the collections in the Library of Congress were approximately doubled. By the end of the 80s, we were managing our largest and most important documentation program ever.

In last year's annual report, I detailed some of the specific initiatives undertaken by my senior staff, which led to the revitalization of HABS/HAER: Sally Tompkins' work on DARCOM; Kenneth Anderson's revitalization of the HABS recording program; Eric DeLony's revitalization of the HABR recording program; and the 50th anniversary celebration of HABS (1983). These were followed by a new generation of project leaders including Richard Anderson, John Burns, Paul Dolinsky, Gray Fitzsimons, and Kim Hoagland. As the decade ended, another new generation of project leaders was emerging, such as Robbyn Jackson, Catherine Lavoie, Sara Amy Leach, Frederick Lindstrom, Joseph Balachowski, Francie Robb, Joel Sabadasz, Michael Workman and Mark Brown. This year, I will detail the contributions of many outside sponsors, whose support has also contributed to the revitalization of HABS/HAER.

One of the most important factors was the support from the NPS cultural resource managers. Blaine Cliver, North Atlantic Region, integrated HABS/HAER with his own architectural conservation laboratory efforts and developed the most comprehensive documentation record of any NPS region. Darwina Neal, National Capital Region, encouraged us to develop our landscape architectural documentation and other projects in that region. Paul Hartwig, Southeast Regional Office, used us for some of his most difficult conservation projects, such as the fortifications at San Juan and at the lighthouse at Cape Hatteras, as well as many others. Andy Ketterson, Midwest Regional Office, established one of the longest-running HABS/HAER programs. Tom Mulhern and Margaret Pepin-Donat supported numerous projects in the Western Region; Rodd Wheaton in the Rocky Mountain Region; Carey Peirabend and Tom Solon in the Southwest Region; Stephanie Toothman and Kathy Gilbert in the Pacific Northwest Region; and Leslie Hart and Steve Peterson in the Alaska Region. Randy Biallas of the Historic Architecture Division, and John Gingles, manager of the Parks Road Program, also provided invaluable support and assistance. Randy Cooley has been very supportive of our efforts in the America's Industrial Heritage Project. And, of course, we have received much support from the regional directors, park superintendents, and other NPS managers.

HABS/HAER has also been strongly supported at the State level. Kathryn Gualtieri, combining her responsibilities as State Historic Preservation Officer (SHPO) in California and responsibilities to the second largest park system in the United States (after the National Park Service), initiated a multi-year program

to document the most significant historic structures in the California State Park System to HABS/HAER standards. Jonathan Pricker of the Louisiana SHPO office has developed the most innovative approach by using state universities to develop documentation that meets HABS/HAER standards. Statewide HABS/HAER photodocumentation projects have been sponsored by Jim Denny (Missouri), Christie Fant (South Carolina), Nina Archabal and Ian Stewart (Minnesota), and Valerie Talmadge (Massachusetts). Gail Rothrock (Prince George's County, Maryland) has developed a HABS photodocumentation project at the Certified Local Government (CLG) level that promises to be a model for others. Congressman Peter Kostmayer initiated a similar project for Buck's County, Pennsylvania. We have also seen strong State support for a new and innovative generation of HABS catalogs; beginning with Georgia by John Linley, Alabama by Bob Gamble, and California by Sally Woodbridge. This new generation is being continued in the forthcoming catalogs on Delaware, New Mexico, and Pennsylvania.

Another important component of HABS/HAER is academia. This nation's schools of architecture and history not only provide us with the finest students for our summer program, but also documentation for the Charles E. Peterson Prize competition. University of Virginia Professor Ed Lay has been teaching HABS measured drawing courses for more than fifteen years, and his students have won many of the Peterson Prizes. University of Illinois Professor John Garner has incorporated HABS documentation into an outreach program that the school of architecture integrates with the priorities of the SHPO. HABS measured drawing courses under William Brockway at Louisiana State University and under Eugene Cizek at Tulane University have not only produced excellent students for the HABS/HAER program but have won many of the recent Peterson Prizes. Kim Harden's work at Auburn University--and in the coming year at Tuskegee University-should be acknowledged for the number of qualified students HABS/HAER has received from her course, as well as for the development of a statewide measured drawing prize named after the first HABS district officer, Walter Burkhardt. Texas Tech's Professor John White has provided HABS/HAER with qualified students for twenty-five years and, incidentally, has himself served as HABS supervisor for twefity-five successive summers. Professor Robert Giebner, University of Arizona, has provided support to HABS since he began teaching in 1963. Special mention should be also made of Wayne Bell (University of Texas); David Hermanson (Ball State University); Michael Tomlan (Cornell University); and David Woodcock (Texas A&M University). One of the most intriguing developments in academia is the development of interdisciplinary centers related to HABS/HAER, such as Emory Kemp's Institute for the History of Technology and Industrial Archeology at West Virginia University, and David Ames' Center for Historic Architecture and Engineering at the University of Delaware.

We have been supported by outstanding publishers, including Dana Pratt and Evelyn Sinclair of the Library of Congress (Historic America); Diane Maddex of Preservation Press (Industrial Eye, America's City Halls, and others); Sue Denny of the University of Missouri Press (A Record in Detail); and John Hoke of the AIA Press (Recording Historic Structures).

Our colleagues at the Library of Congress, Dr. Stephen Ostrow, Renata Shaw, Ford Peatross, Mary Ison, Betsy Parker, and Joyce Nalewajk, also deserve special recognition.

Many supporters and contributors to HABS/HAER over the last decade have been omitted due to space limitations. However, the names included above serve to indicate the variety of contributors to the HABS/HAER program in the 1980s. Rather than a Federal program run in Washington, HABS/HAER has been a cooperative effort by many professionals from a variety of institutions.

I look forward to the 1990s and my second decade with HABS/HAER.

Robert J. Kapsch, Ph.D.

IN MEMORY OF



SALLY KRESS TOMPKINS

Sally Kress Tompkins, Deputy Chief, Historic American Buildings Survey/Historic American Engineering Record, died on November 27, 1989, after a long battle with cancer. Sally joined the HABS staff in 1978 as an architectural historian. Initially, she specialized in the survey and documentation of Federal installations, particularly military posts such as the academies at West Point and Annapolis, to assist them in complying with the Historic Preservation Act of 1966. In later years, she led many HABS/HAER initiatives, such as the maritime initiative to develop measured drawings of historic ships throughout the United States. She was instrumental in developing Guidelines for Recording Historic Ships. She was a major force in the revitalization of HABS/HAER during the 1980s.

Sally was born and raised in Pittsburgh. She received her bachelor's of arts degree from Skidmore College and her master's of arts degree from George Washington University. She was very active in the Society of Architectural Historians, serving on the executive committee of the Society's Buildings of the United States publication series. Through her efforts, the first joint fellowship of its kind was developed between the Society and HABS.

Sally will be remembered by her three children, Alicia, Ted and Ben; her sister, Nancy Douglas; her brother, Jim Kress; her granddaughter, Shaun Tompkins; and her many friends and colleagues both within and outside the National Park Service.

Those who wish to make a donation in Sally's memory may do so by contributing to the Sally Kress Tompkins Fund, Society of Architectural Historians, 1232 Pine Street, Philadelphia, PA 19107-5944.

Sally's last piece of work for HABS/HAER is reproduced on the following page, "Looking Ahead: HABS/HAER in the 1990s."

Sally contributed very much to HABS/HAER. She will be greatly missed.

LOOKING AHEAD: HABS/HAER IN THE 1990s

Sally Kress Tompkins Deputy Chief HABS/HAER

The end of the decade is a time to review the accomplishments of the last ten years and to look forward to the next.

One area that I expect to stay constant in HABS/HAER's operations is our emphasis on recording nationally significant structures. In the early 1980s, the emphasis on recording the most important structures in the country was the source of strength and development for the programs. Although we encourage private donations of documentation meeting HABS/HAER standards on all types of properties on or eligible for the National Register, HABS/HAER supervised projects have been limited, since 1982, to National Historic Landmarks and the primary historic structures of the National Park Service. By the year 2000 we expect the HABS/HAER collections will have quality information on most of these structures.

In recent years, HABS/HAER has revived interest in historic landscapes and has undertaken a new maritime initiative (the latter, I am pleased to say, I had a role in developing). Documenting railroad rolling stock and historic town plans are the lastest initiatives developed by Washington staff members. I have no doubt that new documentation initiatives will be launched to meet the needs of a growing and expanding historic preservation community.

Technology is certainly an area that will force change in our programs; to a great extent it already has. We have begun to use new photogrammetric techniques that are coordinated with specialized computer software to produce measured drawings. New hand-held computers in the office automatically Leroy preprogrammed messages onto our drawings while our historians and architects use Word Perfect and CADD systems. The HABS/HAER data base developed in 1982 (the first major cultural resource data base developed in the National Park Service) needs expansion and modernization. New methods for delivering HABS/HAER images to the user, most of which are computer based, look extremely promising. The 1980s were certainly a time for technological change in our programs; the 1990s may accelerate that change.

Over the next decade we will continue to seek strong professionals, not only for field work, but also in in the Washington office where the projects are developed, data is analyzed and drawings are developed. During the 1980s we greatly expanded the job opportunities available for architects, historians, and photographers who wanted to work for HABS/HAER. We will continue to offer and expand, if possible, these opportunities in the coming years.

The 1980s was a time when HABS/HAER built a strong base for continued architectural and engineering documentation, executed to the highest standards possible. It is that strong base that I know will sustain a vigorous and healthy program throughout the 1990s.

FUNDING AND LEGISLATION

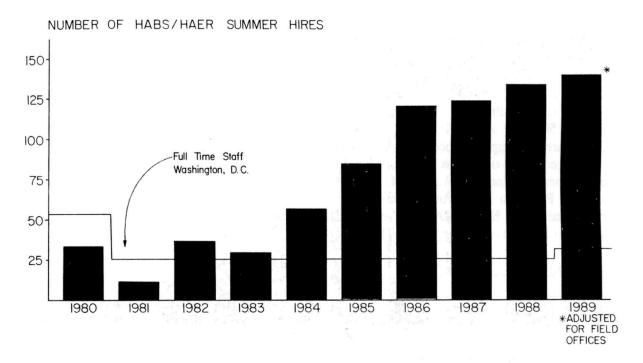
Funding

In fiscal year 1989, the HABS/HAER Division received \$971,500 in appropriated funds. An additional \$465,000 in appropriations was received as an "add on" for support of America's Industrial Heritage Project (\$315,000) and for steel mill documentation in Pittsburgh and Allegheny County (\$150,000). An additional \$634,600 was received in donations and reimbursable accounts, almost entirely to support specific HABS/HAER projects. Thus, the total FY 1989 HABS/HAER budget (direct costs only) was \$2,071,100, a 2.5 percent increase over FY 1988 funding levels. This amount does not include monies in the HABS and HAER general donation accounts, in the Charles E. Peterson Prize Fund (administered by The Athenaeum of Philadelphia) or for in-kind services received by HABS/HAER to assist field recording. Funding projections for fiscal year 1990 indicate another increase for HABS/HAER.

HABS/HAER In Legislation

Fiscal year 1990 was the second consecutive year that specific HABS/HAER projects were required by Federal legislation. Specific legislation introduced in 1989 for fiscal year 1990 included:

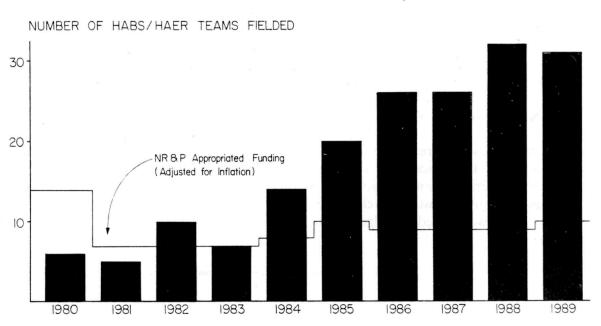
- * Department of the Interior Appropriations Bill Congressman John Murtha (D-Pa.) introduced an add-on for \$345,000 (up from \$315,000 in FY 1989) for HABS/HAER work on the America's Industrial Heritage Project (AIHP) being undertaken in the nine-county area of Pennsylvania centered on Johnstown and Altoona. AIHP is under the overall direction of NPS Manager Randy Cooley. This was passed and signed into law.
- * Department of the Interior Appropriations Bill Senator John Heinz (R-Pa.) offered an amendment from the floor, adding \$135,000 (down slightly from \$150,000 in FY 1989) for HAER to continue steel mill documentation and related work in Pittsburgh and Allegheny County, Pennsylvania. This was passed and signed into law.
- * H. R. 2944, to authorize the establishment of the Man in Space National Historic Site in Cape Canaveral, introduced by Congressman Joel Hefley (R-Col.) which, among other sites, would require the documentation to HABS/HAER standards of the Redstone Tests Stand at Huntsville, Alabama; the Saturn V space vehicle, also at Huntsville; Space Launch Complex 10 at Vandenberg Air Force Base, California; launch complexes 13, 14, 19 and 24 at Cape Canaveral Air Force Station; and numerous other facilities throughout the country related to Man in Space. This was not passed.
- * Department of the Interior Appropriations Bill Although not mentioning HABS/HAER specifically, both the House and the Senate have introduced language adding \$600,000 to support an organization sympathetic to the goals of HABS/HAER--The Institute for the History of Technology and Industrial Archeology at West Virginia University (Dr. Emory Kemp, Director). This was passed and signed into law.



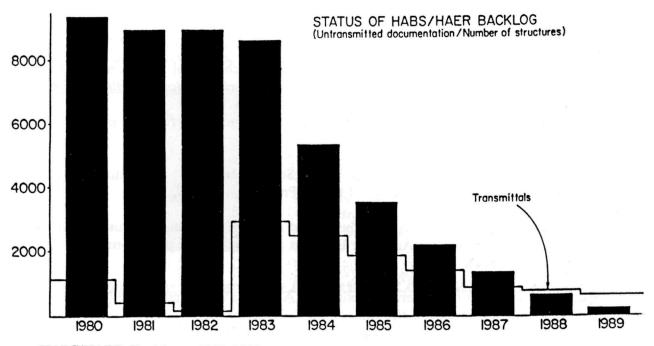
Summer Recording Program

The HABS/HAER summer recording program is important to HABS/HAER not only because of the buildings documented or leadership involved, but also because it offers a major means for students to become involved in the historic preservation field. Some 3,000 architects, historians, and photographers have received their initial exposure to historic preservation through HABS/HAER field teams.

Fiscal year 1981 had the smallest summer recording season in ten or more years for HABS/HAER. However, by 1985, we had revitalized our summer recording program. Each season after 1985 set new records in terms of the number of structures documented by HABS/HAER.



THE 80s IN REVIEW



HABS/HAER Backlog: 1980-1989

A major problem facing HABS/HAER at the beginning of the 1980s was the large backlog of incomplete, unprocessed documentation.

The following chart indicates the progress made by HABS/HAER in eliminating this backlog. Each year, a HABS/HAER coordinating committee is named, project assignments made, and transmittal progress tracked. Beginning in 1983, regular HABS/HAER staff were augmented by special teams of summer students, especially hired to handle transmittals of the HABS/HAER backlog. The following graph indicates the effectiveness of these RAT (Reduction and Transmittal) teams. For instance, documentation on no fewer than 2,900 historic structures (including over 5,000 sheets of drawings, 18,000 large format photographs and over 7,000 data pages, as well as other material) was transmitted to the Prints and Photographs Division, Library of Congress during fiscal year 1983.

This effort approximately doubled the already substantial HABS/HAER collections in the Library of Congress. As of the end of 1989, the HABS/HAER collections stood as follows:

	No. of Structures	No. of <u>Drawings</u>	No. of Photographs	No. of Data Pages
HABS Collection	20,914	45,056	103,820	51,175
HAER Collection	1,957	1,795	26,181	21,240
TOTAL	22,871	46,851	130,001	72,415

HABS/HAER Honors and Awards: 1980-89

- 1989 Co-recipient (with **Robert Gamble**) of the Society of Architectural Historian's Antoinette Forrester Downing Award for the *Alabama Catalog*, *Historic American Buildings Survey*.
- 1985 U.S. Department of the Interior Unit Award for Excellence of Service, awarded to HABS/HAER Division.
- Joint Resolution of the Congress of the United States commending the Historic American Buildings Survey (S.J. Res. 173), signed by the President, April 17, 1984.
- Louise duPont Crowninshield Award, the highest award of the National Trust for Historic Preservation, to the Historic American Buildings Survey, the only public program to date to receive this award.
- Special Citation from the American Institute of Architects conferred on the National Park Service of the Department of the Interior for the able and distinguished administration through the first fifty years of the Historic American Buildings Survey.
- Presidential Congratulations to the Historic American Buildings Survey on the occasion of the 50th anniversary of HABS, signed by President Ronald Reagan.

Major HABS/HAER Publications: 1980-89

1989 <u>Recording Historic Structures</u>, John A. Burns (editor) and the staff of HABS/HAER. AIA Press, Washington, D.C.



The "bible" of HABS/HAER, this replaces Harley McKee's classic *Recording Historic Buildings*, last issued almost twenty years ago. Covering both HABS and HAER, we feel it will be the standard in its field for the next decade or two. See page 24 of this report for ordering information.

1988 <u>Guidelines for Recording Historic Ships</u>, Richard K. Anderson, Jr., Government Printing Office, Washington, D.C.



This congressionally mandated publication represents the definitive work on recording large historic ships. Its publication marks the revival of the 1930s' Historic American Merchant Marine Survey (HAMMS) within HABS/HAER. Program manager was Sally Tompkins, deputy chief, HABS/HAER.

1988 <u>A Record in Detail.: The Architectural Photographs of Jack E. Boucher</u>, University of Missouri Press, Columbia, Missouri.



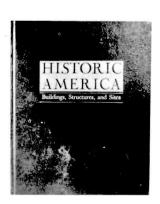
In the more than twenty-five years Jack Boucher has been with HABS, he has produced over half of the large-format images in the HABS collection. This publication well illustrates why Boucher's photographs establish the standard for the field. It also establishes the standard for reproduction of architectural photographs. Preface by Robert Kapsch. Introductory essays by William Pierson, William Lebovich, and Jack Boucher. Publisher was Sue Denny.

1987 <u>Industrial Eye: Photographs by Jet Lowe from the Historic American Engineering Record</u>
The Preservation Press, Washington, D.C.



Recipient of the award from the Leipzig International Book Design Exhibition (1989); selected for inclusion in the prestigious American Institute of Graphic Arts Book Show (1987); recipient of awards from the American Society of Association Executives (1987), the Southeastern Library Association (1987), and the Regional Design Award from Print Magazine (1988), this publication not only illustrates the quality of Jet Lowe's work, but the inherent interest in industrial archeology. Preface by Robert Kapsch, text by Gray Fitzsimons and introductory essays by David Weitzman. Editor was Diane Maddex.

1983 Historic America: Buildings, Structures, and Sites, Library of Congress, Washington, D.C.



Produced for the 50th anniversary of HABS, this is the first national catalog to the HABS collection in more than forty years. It earned a Merit Award in 1984 at the Art Director's Club of New York. Introductory essays were edited by C. Ford Peatross, checklist compiled by Alicia Stamm and the staff of HABS/HAER. Forward by Russell E. Dickenson, Director, NPS; Robert Broshar, President, AIA: Daniel J. Boorstin, Librarian Essays by Mary M. Ison, Charles E. of Congress. Peterson, Samuel Wilson, Jr., George B. Tatum, Carolyn Pitts, Carole Rifkind, Richard Sanders Allen, Rodris Roth, Denys Peter Myers, Margot Gayle, Carl Lounsbury, David G. DeLong, Robert Bruegmann, John A. Burns, C. Ford Peatross, and Robert J. Kapsch. Publisher was Dana Pratt with the assistance of Evelyn Sinclair.

Other major publications:

* Alabama: The Alabama Catalog: Historic American Buildings Survey, A Guide to the Early Architecture of the State, Robert Gamble, The University of Alabama Press, University, Alabama, 1987.

Because of this publication, Robert Gamble and HABS were awarded the Antoinette F. Downing Award (1989). In addition to the HABS catalog, this publication contains a photo essay, "Historic Architecture in Alabama,' by Robert Gamble. Introduction by Nicholas Holmes, Jr. Editors for the University of Alabama Press were Debbie Davis and Elizabeth May.

* California: <u>California Architecture: Historic American Buildings Survey</u>, Sally B. Woodbridge, Chronicle Books, San Francisco, 1988.

Like Gamble's <u>The Alabama Catalog</u>, Woodbridge includes a photo essay, "The History of California Architecture." Another essay is "HABS in California," by S. Allen Chambers, Jr.

* Georgia: The Georgia Catalog: Historic American Buildings Survey, A Guide to the Architecture of the State, John Linley, the University of Georgia Press, Athens, Georgia, 1982.

The first of a new type of HABS catalogs, John Linley also includes a photo essay, "A History of the Architecture of the State."

* General HAER Checklist: 1969 - 1985: A Listing of Sites, Structures and Objects Documented by the Historic American Engineering Record
National Park Service, Washington, D.C.

This listing of sites, structures and objects documented by HAER was compiled by Ellen Boone Minnich and Alice Keyes to serve as a guide to the HAER collection, the first of such since 1976. Eric DeLony was project leader.

HABS catalogs are currently being developed for Delaware, New Mexico and Pennsylvania.

The Charles E. Peterson Prize is the highest award in the United States for measured drawings meeting HABS standards. The first awards were given in 1983 in conjunction with the 50th anniversary of HABS.

Charles E. Peterson Prize Winners - 1983-1988

1983:

First Place:

Student:

Anne Weber

School:

Columbia University

Faculty Sponsor: Daniel M. C. Hopping

Building:

Mulford House in the East Hampton National Historic Landmark District, New York

Second Place:

Student: School:

Reed Alan Black

University of Florida Faculty Sponsor: F. Blair Reeves

Building:

Tampa Bay Hotel (now University of Tampa), Tampa, Florida

Third Place:

Student:

Deborah Diane Johnson

School:

University of Virginia Faculty Sponsor: K. Edward Lay

Building:

Pavilion X in the University of Virginia NHL District, Charlottesville, Virginia

1984:

First Place:

Students:

Mary A. Reuman-Redenbaugh and Harry Bradley, III

School:

University of Virginia Faculty Sponsor: K. Edward Lay

Building:

Pavilion IV in the University of Virginia NHL District, Charlottesville, Virginia

Second Place:

Students:

Vicky Borchers,, Bruce Bradsby, James Davidson, Sandra Gramley, Alan Hohlfelder, Gary Maples, Steve Monroe, Andrew Need, Gary Oliver, Charles Peveto, Barbara

Rottler, Denise Seavitt, Teri Taylor, Bartlett Wales, and Charles Wooldridge

School:

Texas A&M University Faculty Sponsor: David G. Woodcock

Building:

Cavitt House and Log Cabin, Wheelock, Texas

Third Place:

Students:

Kristen Ashbeck, Michael Baker, Deborah Hardt, Stephanie Husfelt, Michael Molnar,

and Lee Scott

School:

Texas A&M University Faculty Sponsor: David G. Woodcock

Building:

Schmid Brothers Building, Brenham, Texas

1985:

First Place:

Students:

Edwin K. Denham, Daniel R. Ellingson, Gary T. Evans,

and James S. Lohmeyer

School:

University of Arkansas

Faculty Sponsor: Elam L. Denham Building:

Lycurgus Johnson House, Lake Village, Arkansas

Second Place:

Students:

Richard Strothman, Alejandro Busto, Jerrold Parsey, and David Mann

School:

Ball State University

Faculty Sponsor: David R. Hermansen

Building:

Logansport State Hospital, Women's Infirmary, Logansport, Indiana

Third Place: Students: Edwin K. Denham, Daniel R. Ellingson, Gary T. Evans, and James S. Lohmeyer

School: University of Arkansas Faculty Sponsor: Elam L. Denham

Building: Carolina Methodist Church, Rosston, Arkansas

1986:

First Place: Students: Steven Eric Nys and David Burger

School: Washington State University

Faculty Sponsor: J. William Rudd

Building: T. A. Leonard Barn, Pullman, Washington

Second Place: Student: Timothy R. Hanna

School: Hampton University Faculty Sponsor: Solil Banerjee

Building: Adam Thoroughgood House, Virginia Beach, Virginia

Third Place: Students: David Haney, John Jensen, Kui Mew Wong, and Judy S. I. Yeoh

School: University of Arkansas Faculty Sponsor: Elam L. Denham

Building: Old Monroe Jail, Clarenden, Arkansas

1987:

First Place: Student: Neal A. Vogel
School: University of Oregon

School: University of Oregon Faculty Sponsor: Donald Peting

Building: Eugene Mill & Elevator Company, Eugene, Oregon

Second Place: Student: Gabrielle Lanier

School: University of Delaware Faculty Sponsor: Bernard Hermann

Building: Ike Cleaver Muskrat Shed, Odessa vicinity, Delaware

Third Place: Students: Jacqueline H. George, Jose Luis Miranda, Jr., Lori S. Smith and Michael Stauffer

School: University of Florida

Faculty Sponsor: F. Blair Reeves and Herschel E. Shepard Building: Don Joseph Tovar House, St. Augustine, Florida

1988:

First Place: Student: Todd Skendarian

School: Arizona State University Faculty Sponsor: Barbara Kolby

Building: Oaklawn Avenue Waiting Station, South Pasadena, California

Second Place: Students: Robert Gilvesey, Timothy M. Gregg, Priscilla J. Holt, Mark W. Igleski, Joseph P.

Matyi, Jonathan C. Spodek, and Barry R. Sweden

School: University of Illinois at Urbana-Champaign

Faculty Sponsor: John S. Garner

Building: Patrick Fitzpatrick House and Barn, Lockport, Illinois

Third Place: Students: Deborah Adkinson, T. Paul Bates, Nancy Burke, Judith E. Collins, Darla S. Davis,

David Harris, Karen Hundt, Lee Ann Jackson, Katherine Lynn, Elaine G. Pierce, Mark E. Pierson, Julie Ann Smith, Phillip B. Smith, Michael R. South, Gail M. Tubbs,

Sidney P. Ward, Mae B. Washington, and David Mingtze Wu

School: Auburn University

Faculty Sponsors: Williams Briggs and Kimberly Harden Building: Hightower Building, Lafayette, Alabama

HABS/HAER Minority Hiring Program

In the summer of 1988, we were congratulating ourselves on launching the largest HABS/HAER recording season to date, when someone asked, "How many of those 130 professors, graduate students and architectural students are minorities?" In fact, very few were. This was the beginning of the HABS/HAER minority hiring program.

We decided to begin with the Historically Black Colleges and Universities (HBCUs), since the National Park Service had a program with these schools and because this decision allowed us to focus our efforts. If successful, we plan to broaden our efforts to other minorities.

In the autumn of 1988, HABS/HAER Chief Robert Kapsch contacted the heads of the departments of architecture of the HBCUs. For those that were interested, HABS/HAER sent speakers to those schools to explain the HABS/HAER program and to tell the students of the summer jobs opportunities with HABS/HAER. In several cases, the number of students attending these sessions exceeded 120, and they seemed quite interested in HABS/HAER. In the case of Howard University, we held a "Jobs Fair" at the HABS/HAER exhibit at the Pension Building. We felt that these efforts would substantially increase the number of applications we received from students at HBCUs. In fact, we didn't receive any applications from students attending HBCUs for the 1989 HABS/HAER recording season.

Obviously, we were doing something wrong. Our next thought was to set aside funds and positions that could only be used for minority students. We were quickly informed that such an approach violated several Federal laws.

The approach developed by HABS/HAER for increasing minority student participation in 1990 and beyond focuses on the development of HABS/HAER measured drawing courses at select HBCU schools of architecture. Where HABS/HAER measured drawing courses do exist (University of Virginia, Auburn University, etc.), students who have gone through a measured drawing course have much better delineation skills than a student who has not, thus, increasing their chances for HABS/HAER employment.

HABS/HAER entered into a cooperative agreement with the National Trust for Historic Preservation to sponsor HABS/HAER measured drawing courses in 1990 at two select HBCU schools of architecture, Tuskegee Institute and Hampton University. Acting Dean Major Holland of Tuskegee Institute and John Spencer, head of architecture at Hampton University, were very supportive of these pilot efforts--both scheduled for the spring of 1990. Kim Harden, the instructor who introduced the successful HABS measured drawings course at Auburn, has been selected to teach at Tuskegee. Scott Spence of Colonial Williamsburg has been selected to teach at Hampton. Both are HABS alumni several times over.

HABS/HAER entered into this cooperative agreement with HABS/HAER supporter Diane Maddex, formerly of the National Trust for Historic Preservation. With her departure from the Trust, the program will be managed by Greg Coble and Karen Deale.

ACTIVITIES - 1989

US/ICOMOS and HABS/HAER

Since 1984, HABS/HAER has been the principal supporter of the US/ICOMOS exchange program. The program is administered by Ellen DeLage, under the overall direction of Terrie Morton, Chairman, US/ICOMOS, and Russell Kuene, Program Officer. Through a cooperative agreement, HABS/HAER transfers funds to US/ICOMOS for the intern program. US/ICOMOS solicits qualified applicants from other ICOMOS national committees, and pays the interns a stipend equivalent to the salaries paid to their American counterparts.

Candidates for this program are screened by HABS/HAER staff and must meet the same high standards as their American counterparts. Once selected, the interns are assigned to HABS/HAER recording teams throughout the United States. Because they are expected to work closely with their American team members, fluency in English is required.

Fiscal year 1989 had a number of innovations with respect to the US/ICOMOS intern program. It was the first year that HABS/HAER recruited qualified students from the Eastern Bloc counties, including Russia and Poland, and from Latin American countries. Finally, it was also the first year that HABS/HAER utilized an ICOMOS intern on a year-round basis, Laura E. Salarano from Argentina.

1989 US/ICOMOS-HABS/HAER Summer Interns

Argentina

Mr. Alejandro Lucio Lauria Ms. Mercedes Garzon Maceda

Ms. Laura E. Salarano

Austria

Mr. Gerhard Pfundner

Costa Rico

Mr. Erick Chaves

Denmark

Ms. Anette Arendt Jensen Ms. Lisbet Sand Rosshaug

Ireland

Mr. Tomas Oliver Delahunty

Poland

Mr. Jakub Zemla

Sweden

Ms. Camilla Louise Schlyter

United Kingdom

Mr. Neil Dowlan Mr. Paul Skeet Mr. Richard Terry

U.S.S.R.

Mr. Dalius Vrubliauskas Ms. Lydia Velichko Mr. Aleksej Lashkevich

West Indies

Mr. Patrick St. X. Williams

In addition, three American architectural students worked two months in the U.S.S.R. and one month working on a HABS/HAER summer project here in the United States. The students were Hugh David Hughes (University of Colorado), who worked in Lithuania and at the Virginia State Capitol in Richmond, Virginia; Mary Kay Lanzillotta (University of Pennsylvania), who worked in Moscow and at the White House in Washington, D.C.; and John David Kollitz (University of Wisconsin), who worked in Leningrad and at Dumbarton Oaks, also in Washington, D.C.

HABS Celebrates the 200th Anniversary of the White House (October 13, 1992)

On October 2, 1989, HABS/HAER Chief Robert Kapsch attended a meeting at the White House to discuss the central project of the 200th anniversary of laying the cornerstone of the White House. The project includes the comprehensive documentation of the structure to HABS standards. Funded by the American Institute of Architects, the documentation will be accompanied by a publication. This will supplement the current exterior White House project directed by Chief Usher Gary Walters and Associate Director James McDaniel of the National Park Service's National Capital Region.

Officials attending the meeting included, (l-r. below), Robert Kapsch, Bernard Meyer, Executive Vice President, White House Historical Association; Rex Scouten, Curator, The White House; Benjamin E. Brewer, Jr., FAIA, President, The American Institute of Architects; Gary Walters, Chief Usher, The White House, and James P. Cramer, Hon. AIA, Executive Vice President/CEO, American Institute of Architects.

Note the quality of the stone carving above the north entrance. The thirty to forty coats of paint applied over the last two centuries has preserved the excellent carving in one of the last remaining examples of the first Federal construction program in Washington, D.C. (1791-1800).



Photographer: Jet Lowe

HAER Celebrates 20 Years

Established in 1969 by ratification of a tripartite agreement among the American Society of Civil Engineers (ASCE), the Library of Congress and the National Park Service, HAER recognized twenty years of documenting America's engineering heritage by hosting a 20th anniversary luncheon on January 18, 1989. Its founders and early supporters were invited. The purpose of the luncheon was not only to commemorate HAER's twenty years of achievements, but to also begin planning its 25th anniversary celebration in 1994.

Suggested activities included a 25th anniversary catalog, a history of HAER that would capture the memory of its founders on the creation of the program, on whether HAER has accomplished its mission, on future directions, and on the influence of HAER toward establishing industrial archeology and engineering history as part of the national ethic. Charles Hosmer, chronicler of the historic preservation movement, suggested that an essay be written that would place HAER's documentation into a context of increased recognition and appreciation of America's technological history.

Attendees included: (front row, 1-r.) Eric DeLony, Chief of HAER; Jerry L. Rogers, Associate Director for Cultural Resources, NPS; Stephen Ostrow, Library of Congress; Neal Fitzsimons, HAER founder from the ASCE; HABS/HAER chief Robert Kapsch, and Jere Hathaway Wright (daughter of Dr. Gail A. Hathaway, noted hydraulic engineer and member of the HAER advisory board for a number of years); (back row, 1-r.) Jack Boucher; Jean Yearby; Carole Huberman, former HAER historian; Douglas Griffin, former chief of HAER; Ray Freeman, former Associate Director of the National Park Service; Ernest Allen Connally, Chief Appeals Officer, NPS; James Massey, former Chief of HABS; Herb Hands, ASCE; Richard Anderson; Jet Lowe; Robbyn Jackson; Richard Henderson; Ford Peatross, Library of Congress; and Catherine Lavoie. Others in attendance but not in picture were Rebecca Fitzsimons, William Pierson, Isabel Yang, and Mark Bittle.



Society for Industrial Archeology/HAER Fellowship

In 1989, HAER transferred the initial funds to the Society for Industrial Archeology (SIA) that would allow implementation of the SIA/HAER Fellowship jointly agreed upon through a cooperative agreement entered into in 1988. The fellowship is intended to fund an architect, engineer, historian or photographer to work with the HAER collection or to develop new documentation to be added to the HAER collection. Details of this fellowship will be worked out in 1990 and announced in the SIA Newsletter. Project leaders for HAER are Eric DeLony, Chief of HAER, and Gray Fitzsimons, AIHP Program Manager. Project leader for SIA is its president, Emory Kemp.

Society for Architectural Historians/HABS Fellowship

In 1989, HABS transferred the initial funds to the Society for Architectural Historians (SAH) that would allow implementation of the SAH-HABS Fellowship jointly agreed upon through a cooperative agreement entered into earlier in 1989. This fellowship is intended to fund an architectural historian to undertake research related to the mission of HABS. The details for this fellowship were to have been developed by **Dr. Ozzie Overby**, for the SAH, and by **Sally Kress Tompkins**, for HABS. Details for this fellowship will now be worked out during 1990.

HABS Principal Architect Visits U.S.S.R.

In January 1989, Paul Dolinsky, HABS Principal Architect, was invited to the Soviet Union to develop a young professional architectural student exchange program. Accompanying Dolinsky were Terrie Morton of the International Council on Monuments and Sites (ICOMOS) and her husband, Hamilton Morton, representing the American Institute of Architects (AIA). Traveling from Moscow to Leningrad and then to Vilnius, Lithuania, Dolinsky met with many Soviet preservationists and studied various restoration projects. Highlights included tours of the Kremlin in Moscow, of the eighteenth-century Leningrad palaces, and of the old town of Vilnius.

The protocol signed by Sergei Petrov, President of USSR/ICOMOS and Chief of the Central Board of Monument Protection/Restoration and Capital Construction of the USSR Ministry of Culture, resulted in the exchange of three Soviet students to work on HABS projects and three American students to work on similar Soviet projects.

Coal Patch Workshop

The newly-renovated Johnstown Flood Museum in Johnstown, Pennsylvania, was the setting last June for a workshop on historic coal-company towns. Sponsored by the America's Industrial Heritage Project and the Johnstown Flood Museum, the conference was organized by HABS Senior Historian Kim Hoagland as an outgrowth of HABS Historian Margaret M. Mulrooney's work on coal-company towns in southwestern Pennsylvania. Speakers addressed the planning and architecture, implications for labor relations, ethnography and culture, and approaches to preservation of coal-company towns, mostly in the Appalachian region. A field trip to neighboring coal towns culminated in a Slovak dinner at St. Stephen's Church in Cambria City, Johnstown. The workshop attracted eighty-five enthusiastic participants.

HABS California Catalog and Exhibit

On May 17, 1989, the California Historical Society and the California State Historic Preservation Office sponsored a reception, HABS exhibit and *California HABS Catalog* book party at the California Historical Society headquarters at the Whittier Mansion in San Francisco.

Presided over by Mrs. Bernard Muskhardt, president of the California Historical Society, the program included the Governor's Preservation Awards, presented by State Historic Preservation Officer Kathryn Gualtieri. Robert Kapsch, Chief of HABS/HAER, represented HABS/HAER and presented HABS salon boards to Muskhardt, Gualtieri, Mrs. Marks, and <u>California HABS</u> <u>Catalog editor</u>, Sally Woodbridge.

Offered for sale in most California book stores, the <u>California HABS Catalog</u> has promise of becoming a best seller. Certainly this fine book, which is much more than a catalog, is required reading for anyone desiring to understand the architectural development of the West Coast.

The final presentation of the afternoon was made by **Sally Woodbridge**, who concluded her remarks with, "HABS/HAER is a wonderful program. If you are not contributing to it, you should."

Prince George's County, Maryland, Photodocumentation Exhibit

On May 17, an exhibit opening was held at the restored "Darnall's Chance" in Upper Marlboro, displaying select photographs of twenty-five historic sites in Prince George's County, Maryland. The exhibit was the result of a cooperative project between HABS and the Maryland National Capital Park & Planning Commission on behalf of the Prince George's County Historic Preservation Commission (HPC) to document historic sites throughout the county. This mid-project exhibit opened in celebration of Preservation Week. The large format photographs were the work of HABS photographer Jack E. Boucher. The project to document Prince George's County's historic architecture is being undertaken by Boucher, along with HABS historian, Catherine C. Lavoie, working with Gail Rothrock, director, and Susan G. Pearl, research historian with the HPC. The photographs were selected and the exhibit put together by Boucher and Lavoie.

HABS/HAER Exhibit at the National Building Museum

"Documenting Our Heritage: The Historic American Buildings Survey/Historic American Engineering Record, 1988 Projects," an exhibition on the documentation of historic structures by HABS/HAER, opened at the National Building Museum in Washington, D.C., on December 8, 1988, and remained on display through February 1989. Using large-format photographs, measured drawings, and historical data pages, the exhibit explained the documentation process employed by HABS/HAER to record the nation's outstanding historic structures. Inventory cards, field records, related artifacts, and equipment used in recording were also featured to help the viewer understand the process of documentation, as well as the structure being recorded. The exhibit was arranged by Robert J. Kapsch and Robert Deumling, president of the National Building Museum. David Chase was curator.

The exhibit highlighted seven of twenty-eight projects undertaken during HABS/HAER's 1988 summer recording season and reflected a diversity of structures, geographic areas, and recording techniques. They are: the Virginia State Capitol, a neoclassical building designed by Thomas Jefferson in 1785; Scotty's Castle, a unique Spanish-Revival residence located in Death Valley National Monument in California; Castillo de San Felipe del Morro, a Spanish fortification guarding the entrance to San Juan Harbor in Puerto Rico; Block Island Southeast Light, an 1873 U.S. Coast Guard facility off the coast of Rhode Island that still uses a nineteenth century Fresnel lens; the Delaware Aqueduct (1849), the oldest suspension bridge in the country, spanning the Delaware and Hudson Canal at Lackawaxen, Pennsylvania; the BALCLUTHA, one of three existing and intact steel-hulled sailing vessels in the United States and currently berthed at the San Francisco National Maritime Park; and the Cambria Iron Works, an 1860s complex in Johnstown, Pennsylvania, which represents HAER's first study of a fully integrated steel factory.

On December 8, a wine and cheese reception was held in the Grand Hall to open the exhibit.

Chadwyck-Healey to Microfiche HABS/HAER Collections

Dr. Stephen Ostrow, chief of the Prints and Photographs Division, Library of Congress, has announced the finalization of an agreement with Chadwyck-Healey to microfiche the entire HABS/HAER collections. Under this innovative agreement, Chadwyck-Healey will provide assistance in processing the unaccessioned HABS/HAER records through December 1988. The project is scheduled for completion in 1991. Previously, Chadwyck-Healey had microfiched the HABS collection, photographs and data pages, through 1979. Since 1979, the HABS collection has doubled through transmittals. This agreement would permit Chadwyck-Healey to microfiche the remaining photographs and data pages and all of the measured drawings, as well as the entire HAER collection and associated records. Dr. Ann C. Savers, editor with Chadwyck-Healy, is now working in the Prints and Photographs Division, compiling and cataloging the unaccessioned HABS/HAER records.

The first states to be processed will include Texas, Colorado, Illinois, and South Carolina, as well as the District of Columbia,. Inquiries can be made directly to Chadwyck-Healey, Inc., Suite 380, 1101 King Street, Alexandria, Virginia 22314, telephone: 703-673-4890.

Charles E. Peterson Prize

On September 8, 1989, HABS and The Athenaeum of Philadelphia announced the winners of the 1989 Charles E. Peterson Prize at the fall meeting of the American Institute of Architect's Committee on Historic Resources in Chicago, Illinois. The Peterson Prize is an annual award for the best of architectural measured drawings of an historic building produced by students and donated to HABS. The prize honors **Charles E. Peterson, FAIA**, founder of the HABS program, and it is intended to increase the awareness and knowledge of historic buildings throughout the United States.

A total of twenty-eight entries from ten different universities was submitted. Five of the entries had National Historic Landmark status and an additional eight are listed in the National Register of Historic Places. The 155 students who participated in the contest produced 353 measured drawings for inclusion in the HABS collection at the Library of Congress.

First place and \$750 was won by a team of nine students, Mary C. Bowlin, Joseph D. Brewton, C. Bayne Dickinson, Joel D. Fontenot, Jeanne G. Gewalt, Mohdsufian Mohdtahir,

Pamela J. Richard, Karl W. Stumpf, and Buryl Terro from the School of Architecture at the Louisiana State University. They produced drawings of the Livestock Judging Pavilion, one of the first group of twenty-one buildings erected on the campus and designed in 1923 by architect Theodore C. Link. Faculty sponsor was **Professor William Brockway**, FAIA.

The \$500 award for second place went to twelve students from the School of Architecture at Tulane University, Craig Ackerman, Huyen Bui, Tanya Caruso, Ellen Davis, Jim Elmasry, Peggy Fitzgerald, Susan Herskowitz, Julia Hickham, Louis Malachias, Todd O'Brien, Carolyn Parler, and Loren Pope, sponsored by Professor Eugene D. Cizek, AIA. They produced measured drawings of Villa Meillur in New Orleans, Louisiana. The house, listed in the National Register of Historic Places, is a raised creole villa, commissioned in 1828. One of the drawings in this set was a series of sketches by students in the Education Through Historic Preservation - 12 program at Hahnville High School, directed by teacher Lloyd Sensat.

The \$250 third prize went to Amy E. Facca, Catherine Haley, D. Jeffrey Kidder, and Kathryn McCutchen of the University of Virginia's School of Architecture. The four students, sponsored by Professor K. Edward Lay, produced drawings of Pavilion I on the University of Virginia campus. A National Historic Landmark, Pavilion I is part of the "Academical Village" designed by Thomas Jefferson.

In addition to the top prizes, the jury awarded an Honorable Mention to four other entries in the competition. They were:

Students:

Karen M. Boykin, Joseph D. Bishop, Sam R. Coker, William T. Collier, Laurie R. Collum, K. Scott Hill, Hoyte E. Johnson, Jr., Robert C. Martin, Tamatha L. Mauldin, Krista A. Minotti, Laura S. Pringle, David M. Small, Michael R. South, Carl B. Walsingham, Deborah Adkison, Deborah Barber, David Harris, and David Mingtu Wu

School:

Auburn University, School of Architecture

Faculty Sponsors: Professor William S. Briggs and Kimberly E. Harden, AIA

Building:

McNamee-Torbert House, Opelika, Alabama

HONORS AND AWARDS - 1989

Students: Pamela J. Richard and Jeffrey S. Fowler

School: Louisiana State University, School of Architecture

Faculty Sponsor: Professor J. Michael Pitts

Building: Magnolia Mound Plantation, Baton Rouge, Louisiana

Students: William M. Cole, Michael D. Egan, Joe D. Grubbs, Mitchell S. Gwatney, Spencer

Matheney, and Ernest Mbroh

School: Oklahoma State University, Department of Horticulture and Landscape Architecture

Faculty Sponsor: Professor Charles L. Leider

Building: Thomas N. Berry Estate, Stillwater, Oklahoma

Students: Gary R. Anderson, Patricia L. Andersen, Pamela J. Bakken, Diane C. Chonis,

Keven E. Donahue, Karen A. Eid, Brian J. Forss, Jill E. Fuerstneau, Todd M. Kapler,

Lorene J. Lehman, Lisa J. McNelis, Benjamin P. Metzdorf, and Carol A. Prafcke

School: University of Minnesota, School of Architecture and Landscape Architecture

Faculty Sponsor: Professor Foster Dunwiddie, AIA

Building: Washburn "A" Mill, Minneapolis, Minnesota

The 1989 jurors included **Bruce Laverty** from The Athenaeum of Philadelphia, **Scott W. Spence**, AIA from Colonial Williamsburg, representing the AIA's Committee on Historic Resources, and **Richard K. Anderson**, **Jr.** from the Historic American Engineering Record.



L-r: Craig Ackerman (Tulane Univ.), B. Carolyn Parler (Tulane Univ.), William M. Cole (Oklahoma State Univ.) Prof. Eugene Cizek (Tulane Univ.), Prof. William Brockway (Louisiana State Univ.), Joel D. Fontenot (Louisiana State Univ.), Karl W. Stumpf (Louisiana State Univ.), John A. Burns (HABS/HAER), Catherine Haley (Univ. of Virginia), and Prof. Foster Dunwiddie (Univ. of Minnesota). Photograph courtesy of Walker C. Johnson, AIA.

HONORS AND AWARDS - 1989

Walter Burkhardt Prize

The Alabama Council of the American Institute of Architects has established a statewide competition, the Walter Burkhardt Prize, to recognize the best measured drawings done by architecture students in the State of Alabama. This annual award was begun in 1988 with the instrumental assistance of Alabama architects Nicholas H. Holmes, III; Nicholas H. Holmes, Jr., and Harvey Jones. The drawings submitted for the Burkhardt Prize must be done to HABS standards and have been submitted as part of a set of drawings entered in the national Charles E. Peterson Prize competition. These drawings are evaluated on their individual merit, based on delineation quality, sheet composition and accuracy of historic documentation.

Five Auburn University architecture students won the 1988 Burkhardt Prize for providing outstanding measured drawings of the historic Hightower Building, a 103-year-old office building in Lafayette, Alabama. The five were among eighteen Auburn students enrolled in AU's measured drawing course taught by Architecture Professor William Briggs and graduate teaching assistant Kimberly Harden. The class placed third overall and won the Charles E. Peterson Prize from among thirty entries from thirteen colleges and universities.

First prize was awarded for the east (front) elevation to Karen Hundt and Julie Ann Smith; second prize for the second-floor plan to Mae B. Washington; third prize for the longitudinal section to T. Paul Bates and Sidney P. Ward; honorable mention for the west elevation and basement floor to Mark E. Pierson; and to Deborah Adkison and Elaine G. Pierce for exterior window and door details. Judith Collins and Michael South provided photography.

Award winners and AU faculty pictured below are (from left), Mark Pierson of Valrico, Florida; T. Paul Bates of Grand Bay, Alabama; HABS/HAER Chief Robert Kapsch; Harden; Briggs; Judith Collins of Lillian, Alabama; and Professor Doug Burleson.



HONORS AND AWARDS - 1989

HABS Wins Downing Award

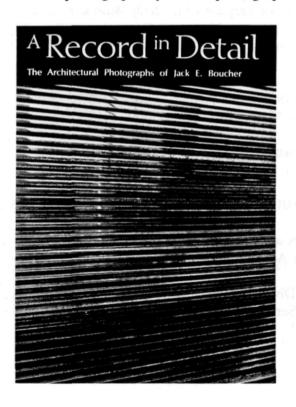
In April, the Society of Architectural Historians honored Robert Gamble, historian with the Alabama Historical Commission, and HABS with the Antoinette Forrester Downing Award for the publication *The Alabama Catalog, Historic American Buildings Survey: A Guide to the Early Architecture of the State*. The Downing Award is given to the author of a published architectural survey and to the government agency that sponsored the survey, with the aims of recognizing excellence in survey work and of encouraging the publication of surveys.

The Alabama HABS catalog is one of the latest in a series of catalog publications. Each catalog lists each structure documented by HABS, with a thumbnail description of the building and a summary of the documentation. The catalog also usually includes introductory essays which describe the history of HABS involvement in the state or, as in the case of Alabama's, the history of architecture in the state.

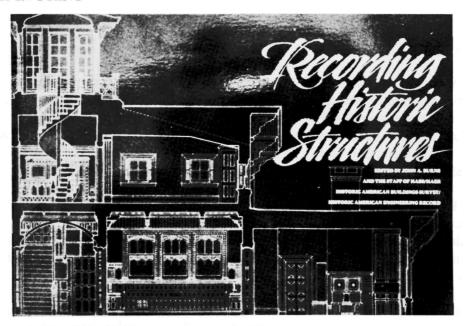
S. Allen Chambers, Jr., former HABS historian, led HABS's involvement in this project. Robert Gamble edited the catalog and also wrote the especially perceptive introductory essay on the architecture of the state. The University of Alabama Press produced the lavish volume, well illustrated with HABS photographs and drawings. Congratulations to all!

AAUP Award

The American Association of University Presses presented a Design Award to Barbara King for the cover of <u>A Record in Detail</u>. The Architectural Photographs of Jack E. Boucher. The book was published in 1989 and features 72 photographs by HABS photographer Jack E. Boucher.



HABS/HAER IN PRINT



RECORDING HISTORIC STRUCTURES

John A. Burns (editor) and HABS/HAER staff. Washington, D.C.: American Institute of Architects, 1989.

<u>Recording Historic Structures</u> offers readers an exceptional guide to recording America's built heritage. Containing more than 200 photographs, drawings and other illustrations, as well as a bibliography and index, the book discusses each aspect of the documentation of historic structures, using examples from the HABS/HAER collections. Documentation details covered in this step-by-step guide are the initial survey, historical research and analysis, documentary photographs, and measured drawings. Developed under the program direction of Deputy Chief Sally Tompkins and editorship of John Burns, AIA, <u>Recording Historic Structures</u> replaces Harley McKee's classic, <u>Recording Historic Buildings</u>, published twenty years ago, as the standard text for HABS/HAER recording. John Hoke, AIA Press, is the publisher.

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A limited number of copies are available to HABS/HAER alumni at a cost of \$10.00, payable to the HABS General Donations Account. Write to:

HABS/HAER Division National Park Service P.O. Box 37127 Washington, D.C. 20013-7127

HABS/HAER IN PRINT

Available Publications:

The following publications are available (single copies), free of charge, from HABS/HAER Washington.

- * HABS Leaflet (1989). The first general description of HABS since 1981.
- * HAER Leaflet (1990). This will be available in March 1990.
- * HABS/HAER Annual Reports. A limited supply of HABS/HAER annual reports are available for the years 1987, 1988 and 1989.
- * "HABS/HAER: A User's Guide," by Robert J. Kapsch, Chief, HABS/HAER, Association for Preservation Technology COMMUNIQUE, Winter 1990. This article provides a comprehensive overview of the HABS/HAER program.
- * Road System of Yellowstone Park (1989). This pamphlet, developed by the 1989 Yellowstone HAER team, is intended to show how HABS/HAER documentation can be used for interpretation.
- * <u>Catalog of Historic Preservation Publications.</u> A catalog of the publications of the National Park Service preservation programs, including HABS/HAER.
- * Standards of the HABS/HAER Programs, as published in the Federal Register in 1983.
- * HABS/HAER Publications List, includes all HABS/HAER publications.
- * <u>Guidelines of HABS/HAER Programs</u>. These guidelines are intended to supplement <u>Recording Historic Structures</u> for those preparing HABS/HAER documentation.
 - * HAER Field Instructions
 - * HABS Field Instructions for Measured Drawings
 - * HABS Historian's Procedures Manual
 - Specifications for the Production of Photographs
 - * Transmitting Documentation to HABS/HAER/WASO
 - Guidelines for Recording Historic Ships

A limited supply of the following HABS/HAER publications also is available:

- * The Historic Architecture and Urban Design of Nantucket (1970)
- * Rehabilitation: Fairmount Waterworks 1978
- * Lockport, Illinois. An HCRS Project Report (1979)
- Sault Ste. Marie. A Project Report (1982)
- * Pueblo of Laguna. A Project Report (1984)
- Texas: HABS Catalog by Paul Goeldner (1974)
 - Energy Conserving Features Inherent in Older Homes by John A. Burns (1982)

Write to:

Jean Yearby

HABS/HAER Division National Park service P.O. Box 37127

Washington, D. C. 20013-7127

The Library of Congress, Prints and Photographs Division, also provides pamphlets for HABS/HAER users. Write to:

Prints and Photographs Division Library of Congress Washington, D. C. 20540



Periodicals:

"Der Historic American Buildings Survey funfzig Jahre Dokumentation von Baudenkmalern in Den Vereinigten Staaten," by Margaret Thomas Will, SONDERDRUCK, Jahrgang XLII, 1988, p. 58. HABS alumna discusses HABS program.

"A City on a Hill," Museum & Arts, July/August 1989, Washington, DC. Brief history of Meridian Hill Park in Washington, D.C.

"The Grand Avenue Viaduct," by Edwin Cordes, Milwaukee History, Autumn 1988, pp. 79-88. HAER alumnus provides the history of a viaduct that was documented as part of the HAER 1987 Wisconsin historic bridge project.

"Historic Structures: Documenting the Railroads," by Gray Fitzsimons and John A. Burns, AIA, National Railway Bulletin, Vol. 53, No. 4, 1988, pp. 4-23. A retrospective look at HABS/HAER's documentation of railroad structures.

"Documentation Study Completed," Furnace Town Times, Spring 1989. Profiles HAER Pittsburgh project.

"America's Heritage," by Sally K. Tompkins, National Building Museum BLUEPRINTS, Vol. VII, No. 1, Winter 1989. Discusses the HABS/HAER summer recording program.

Newsletters:

"Antoinette Forrester Downing Award," The Society of Architectural Historians NEWSLETTER, Vol. XXXIII, No. 4, June 1989, p. 3. Tells of Robert Gamble and HABS as the recipients of the Annual SAH Award for Excellence in Published Architectural Surveys for The Alabama Catalog: Historic American Building Survey: A Guide to the Early Architecture of the State.

News Releases:

Communicado de Prensa, P. O. Box 712, Old San Juan, PR 09002, July 6, 1989. Describes the HABS project that will document Fort San Felipe Del Morro in Old San Juan, Puerto Rico.

Project Publicity

Newspaper articles:

"Photos Capture Uniqueness Of Architecture in P.G.," by Michelle Hall, The Washington Post, (DC), June 22, 1989, pp. MD1, MD11. A description of the Prince George's County (MD) photodocumentation project.

"Odd vistas the quarry; the capture is on film," by Ann Geracimos, The Washington Times, (DC), Monday, July 10, 1989, p. E1. Profiles HAER photographer Jet Lowe.

"Architectural team studies Carter's home," by David Goldberg, The Atlanta Journal (GA), Tuesday, August 29, 1989, Section D, p. 1. An article explaining the work of the HABS team as they document former U.S. President Jimmy Carter's home.

HABS/HAER IN PRINT

"Young architects build on future by protecting the history of Plains," by Mandy Carter, <u>Americus Times-Recorder</u> (GA), Saturday, July 22, 1989, p. 1. Profiles the HABS architects and their work in the town of Plains.

"Park Service group studies Plains, GA.," Charleston, Evening Post (GA), Sunday, August 27, 1989. An overview of the HABS team and its record to document structures throughout Plains, Georgia.

"Your Government at Work," Savannah Morning News (GA), August 28, 1898. An article on the HABS team in Plains, Georgia.

"Illustrators Studying, Sketching Jimmy's Town," by Elliott Minor, <u>Savannah Morning News</u> (GA), August 28, 1989. Another article on the HABS team in Plains, Georgia.

"Mine hoist intrigues historians, architects," by Calvin Lear, <u>The Sunday Advertiser</u> (LA), Sunday, July 23, 1989, p. 11. Profiles the HAER team as they document surface structures within the Avery Island Salt Works on Avery Island, Louisiana.

"Preserved for prosperity. Study documents historic homes," by Lynda V. Mapes,

<u>The Prince George's Journal</u> (MD), January 9, 1989. Vol. 15, No. 5, page A5. Indepth description of the HAER's Prince George's County (MD) photodocumentation project.

"Team brushes cobwebs from old industry," by Michelle Seehoffer, <u>Herald-Standard</u> (PA), Tuesday, June 20, 1989, p. 9. This reporter follows the HABS/HAER team members Chris Davis and Rolla Queen as they document pre-World War II industrial sites in Fayette County, Pennsylvania.

"Engineers, historians sizing up city's buildings," by Barbara F. Cowan, <u>Altoona Mirror</u> (PA), Friday, June 23, 1989. A profile of the HABS/HAER team as they document the Masonic Temple in Altoona, Pennsylvania.

"Student interns focus attention on Steamtown's DL&W yards," by John Hambrose, <u>The Morning Times</u> (Scranton, PA), Wednesday, August 30, 1898. A look at the HAER team as they document the locomotive maintenance facilities at the Scranton Yards at the Steamtown National Historic Site.

"International team here to document remnants of steel industry," by Mary Kane, <u>The Pittsburgh Press</u> (PA), July 1, 1989. The HABS/HAER team documents remnants of the Duquesne Works in Homestead, Pennsylvania.

"Local rail shop history being preserved on film," by Kay Stephens, <u>Altoona Mirror</u> (PA), Sunday, November 20, 1988, p. A10. A profile of HABS photographer Jack Boucher at the Juniata Shops in Altoona, Pennsylvania.

"Planos El Morro," EL VOCERO, (San Juan, Puerto Rico), Thursday, July 13, 1989. Details the HABS El Morro project.

"Architectural Documentation Project Underway," Jeff Davis County <u>NEWS</u>, (Fort Davis, TX), Vol. 4, No. 30, July 27, 1989, p. 1. Article outlines the HABS team and their prospectus in documenting historic structures within Fort Davis.

"Huckabee going to Puerto Rico," Wills Point Chronicle (TX), Friday, June 2, 1989, p. 8A. A profile on Christopher Huckabee, architecture technician from Texas Tech University, who worked on the HABS El Morro team.

"Chris Huckabee Assigned To Team," Glen Rose Reporter (TX), Thursday, June 8, 1989.

"Chris Huckabee," Stephenville Empire-Tribune (TX), Sunday, June 11, 1989.

"Huckabee to work in Puerto Rico," Andrews County (Texas) News, Thursday, June 8, 1989.

"HABS team to survey Apostle's lights," by Claire S. Duquette, <u>The Ashland Daily Press</u> (WI), June 30, 1989, p. 1. Article explains the work conducted by the HABS team that recorded the Raspberry Island Lighthouse at the Apostles Island National Lakeshore.

PEOPLE - 1989

Promotions



Judy Davis



Robbyn Jackson

JUDY DAVIS, Division Secretary, for performing those functions that enabled HABS/HAER to adequately address extremely heavy workloads and quick turnaround times, as well as for her fortitude and diligence in carrying out day-to-day functions.

ROBBYN JACKSON, HAER Architect, who joined HAER as a temporary architect on December 8, 1986. She was responsible for editing and transmitting to the Library of Congress drawings initiated by summer teams. In 1987 and 1988, Robbyn's appointment was extended, during which time she successfully supervised a two-year project to document the BALCLUTHA, a historic steel-hulled, square rigger moored in San Francisco. This maritime project, a first for the HABS/HAER office, was initiated to test the new guidelines established by HAER for documenting historic ships. The effort produced sixty-five measured drawings detailing the ship's rigging, her hull structure, deck configuration, machinery, and joinery work. This year, Robbyn received a promotion and permanent status in the HABS/HAER office for her outstanding skills and leadership ability. During the summer, she again supervised a maritime project, this time the FALLS OF CLYDE, a four-masted, fully rigged ship, the only surviving sailing oil tanker in the

world. Robbyn received her B.A. in Liberal Arts from St. John's College in Annapolis, Maryland; her master's in architecture from Carnegie Mellon University in Pittsburgh.

Kenneth Anderson Receives Department of the Interior Meritorious Service Award

On June 19, 1989, before the American Institute of Architects' Committee on Historic Resources meeting in Washington, D.C., HABS/HAER Chief Robert Kapsch presented former HABS Chief Kenneth L. Anderson with the silver medal of the Department of the Interior Meritorious Service Medal for seventeen years of distinguished service to HABS as architect, principal architect and, finally, as chief.

During this period, Kenneth supervised no fewer than 500 HABS projects--by far the most ever supervised by a HABS employee. He played an important role in the revitalization of HABS/HAER in the early 1980s and was committed to increasing the quality of HABS drawings.

Kenneth Anderson left HABS in 1988 to take over the supervision of the General Services Administration's Arts and Architecture Program.

Kim's Sabbatical

Beginning October 1, **Kim Hoagland**, HABS Senior Historian, is taking a one-year leave of absence to write a book on Alaska. The Society of Architectural Historians is sponsoring a series of guidebooks to the architecture of each state, entitled <u>Buildings of the United States</u>. Currently underway are books on Rhode Island, by **William Jordy**; Michigan, by **Kathryn Eckert**; District of Columbia, by **Pamela Scott**; and Iowa by **David Gebhard**. The Alaska volume is in the second round slated for publication, which also includes former HABS historian **S. Allen Chambers'** book on West Virginia. The series is funded by the National Endowment for the Arts and other private and public sources. Oxford University Press is the publisher.

Papers and Presentations

On November 4-6, 1988, HABS historian Sara Amy Leach attended a conference entitled "Americans and the Automobile," sponsored by the Society for Commercial Archaeology and the Henry Ford Museum & Greenfield Village. There, she presented the paper, "Fifty Years of Parkway Design In and Around the Nation's Capital," which will be included in a book based on the conference presentations, due to be published by Iowa State University Press in 1990.

John Burns, **AIA**, presented a paper entitled "Standardized Construction in the Housing Industry 1930-1950" at the Association for Preservation Technology annual meeting on September 9, in Chicago. The paper will be published in a special issue of the APT Bulletin on "Preserving What's New."

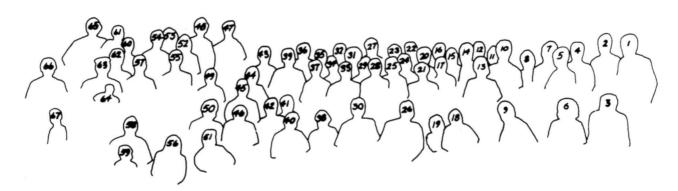
Among the papers and participants at the Vernacular Architecture Forum's 1989 annual meeting, held in St. Louis, Missouri, in May, were presentations by two HABS historians. In a session devoted to multi-unit housing, HABS senior historian **Kim Hoagland** gave the paper "Workers' Capital in a Company Town: Houses in Altoona, Pennsylvania," and former HABS historian **Margaret "Meg" Mulrooney** presented her paper on "Coal Company Towns of Southwestern Pennsylvania." Both projects were developed as part of the America's Industrial Heritage Project. Mulrooney's work was published in its entirety by HABS/HAER as <u>Legacy of Coal</u>: <u>The Company Towns of Southwestern Pennsylvania</u> (1989).

HABS/HAER Summer Picnic

On July 30, at Pohick Regional Park in Fairfax County, Virginia, HABS/HAER held its annual picnic, where nearby project teams and Washington staff met. During the weekend of the picnic, tours of the White House and Gunston Hall in Lorton, Virginia, were conducted for the summer staff. See photograph on following page.

HABS/HAER PICNIC





(1) Robert Kapsch (Washington); (2) Paul Bates (Lettie Howard Project); (3) Jack Boucher (Washington); (4) Krista Minotti (The White House Project); (5) Peggy Boucher; (6) Isabel Yang (The White House Project); (7) Francis Alexander (HABS Alumnus); (8) Peggy Lay; (9) Richard Hayes (Sleeping Bear Dunes Project); (10) Thomas Ford (Dumbarton Oaks Project); (11) Jacub Zemla (Dumbarton Oaks Project); (12) Thea DeLange; (13) Anette Jensen (Altoona Project); (14) Timothy Buehner (The White House Project); (15) Gabriel Delange; (16) Edward Lay (Altoona Project); (17) Martha Tuzson (Steamtown Project); (18) Camilla Schlyter (Allegheny County Steel Project); (19) Marcia Miller (HAER Alumnus); (20) Eric DeLony (Washington); (21) Stephanie Gelb (Steamtown Project); (22) David Small (Lettie Howard Project); (23) William Collier (Lettie Howard Project); (24) Ellen DeLange (U.S. Committee of ICOMOS); (25) Beatrice Parlor (Virginia State Capitol Project); (26) Paul Dolinsky (Washington); (27) David Brown (Lettie Howard Project); (28) Amy Slaton (Steamtown Project); (29) Michael South (Steamtown Project); (30) Frederick Lindstrom (Virginia State Capitol Project); (31) Alan Michels (E. C. Collier Project); (32) Johan; (33) Judith Collins (Virginia State Capitol Project); (34) Neil Dowlan (Allegheny County Steel Project); (35) Patrick X. St. Williams (Allegheny County Steel Project); (36) Richard Henderson, (Washington); (37) Dale Waldron (Jimmy Carter Project); (38) Dana Peak (Jimmy Carter Project); (39) Gerhard Pfundner (Virginia State Capitol Project); (40) Janet Beales; (41) Douglas Anderson (Altoona Project); (42) Jason Breyer (Jimmy Carter Project); (43) Neal FitzSimons; (44) Marlene Bergstrom (Washington); (45) Charles L. Bergengren (Johnstown Project); (46) Richard Anderson (Washington); (47) Robert Anthony (Altoona Project); (48) David Ames (Altoona Project); (49) Patricia Reese (East Broad Top Railroad Project); (50) Dalius Vrubliauskas (Johnstown Project); (51) Kathryn Steen (Steamtown Project); (52) Christina Moon (East Broad Top Railroad Project); (53) Alison Hoagland (Washington); (54) Elaine Pierce (East Broad Top Railroad Project); (55) Thomas Oliver Delahunty (Steamtown Project); (56) Susan Garfinkel (Altoona Project); (57) George Steinrock, Jr. (East Broad Top Railroad Project); (58) Dale Price; (59) Megan Queen; (60) Lola Bennett (Robertsdale Project); (61) Wally Bergstrom; (62) Richard Koochagian (East Broad Top Railroad Project); (63) Rolla Queen (Johnstown Project); (64) Cassity Queen; (65) Paul Skeet (Altoona Project); (66) John Burns (Washington); (67) Andrew Burns.

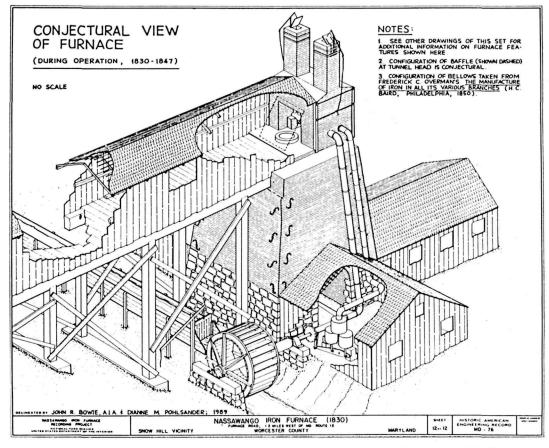
PEOPLE - 1989

New Faces

Elizabeth E. Barthold, HABS Historian, The American University
Timothy A. Buehner, HABS Architect, Ball State University
Judith E. Collins, HABS Architect, Auburn University
Frederick J. Lindstrom, HABS Architect, Virginia Polytechnic Institute and State University
Laura E. Salarano, HAER Architect, Universidad Nacional de Rosario, Argentina (ICOMOS)
Caroline H. Russell, HABS/HAER Social Science Technician, Ohio Wesleyan University
Craig N. Strong, HAER Architect, University of Southwestern Louisiana
Georgette R. Wilson, Social Science Technician, Marymount University

People on the Move

Frederick Engle, HABS/HAER Computer Assistant, to Smithsonian's Air and Space Museum Doreen E. Keys, HABS/HAER Clerk-Typist, to San Francisco, California William W. Lebovich, HAER Historian, to private practice as a historian/photographer Margaret M. Mulrooney, HABS Historian, to pursue a Ph.D at College of William and Mary



Conjectural view of the Nassawango Iron Furnace (1830) during operation from 1830-47. (*Shown*, Sheet 12 of 12 drawings delineated and donated to the HAER collection in 1989 by John R. Bowie and Dianne M. Pohlsander.)

HABS/HAER STAFF ROSTER

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HABS/HAER Division National Park Service P.O. Box 37127 Washington, D.C. 20013-7127 Room 6101 1100 L Street, NW Washington, D.C. 20005

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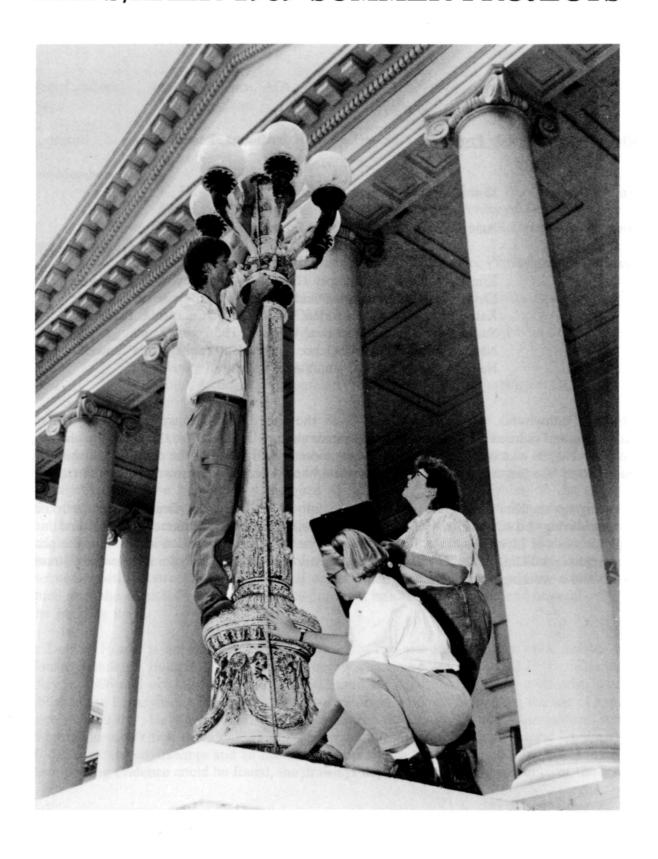
BALACHOWSKI, Joseph D.	HABS Architect	343-9629
BARTHOLD, Elizabeth J.	HABS Historian	343-9617
BERGSTROM, R. Marlene	HABS/HAER Field Program Administrator	343-9600
BOUCHER, Jack E.	HABS Photographer	343-9614
BURNS, John A., AIA	HABS/HAER Deputy Chief (Acting)	343-9604
COLLINS, Judith E.	HABS Architect	343-9631
DAVIS, Judy R.	HABS/HAER Division Secretary	343-9625
DeLONY, Eric N.	Chief, HAER	343-9603
DOLINSKY, Paul D.	HABS Principal Architect	343-9611
ELLIOTT, Robyn M.	HABS/HAER Clerk-Typist	343-9618
FITZSIMONS, G. Gray	HAER Historian/Engineer	343-9608
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JACKSON, Robbyn L.	HAER Architect	343-9630
KAPSCH, Robert J.	Chief, HABS/HAER	343-9606
LAVOIE, Catherine C.	HABS/HAER Historian	343-9609
LEACH, Sara Amy	HABS Architectural Historian	343-9607
LINDSTROM, Frederick J.	HABS Architect	343-9610
LOWE, John T. "Jet"	HAER Photographer	343-9613
MINNICH, M. Ellen	HABS/HAER Collections Management Specialist	343-9599
RUSSELL, Caroline H.	HABS/HAER Social Science Technician	343-9601
SALARANO, Laura E.	HAER Architect	343-9616
STRONG, Craig N.	HAER Architect	343-9615
WILSON, Georgette R.	HABS/HAER Social Science Technician	343-9598
YEARBY, Jean P.	HABS/HAER Publications Specialist	343-9628

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Opposite page: Hugh Hughes (on standard) and B. Carolyn Parler (kneeling) measure the lamp standard on front steps of the Virginia State Capitol. Judith Collins takes field notes.

Photographer: Jack E. Boucher

HABS/HAER 1989 SUMMER PROJECTS



AMERICA'S INDUSTRIAL HERITAGE PROJECT

Altoona Neighborhoods Projects

Altoona, Pennsylvania

Project Leader:

Kim Hoagland

Cosponsors:

America's Industrial Heritage Project

Team Members:

Kim E. Wallace, Supervisory Historian, University of Pennsylvania David Ames, Photographer and Professor, University of Delaware Kathy Sue Edwards, Historian, University of California, Berkeley

Susan L. Garfinkel, Historian, University of Pennsylvania

Nancy L. Smith, Social Science Technician, Pennsylvania State University

Nancy I. Spiegel, Historian, Yale University

Altoona, Pennsylvania, was founded in 1849 as the site of the Pennsylvania Railroad's main locomotive and railroad car maintenance and repair shops. In the 1870s, the company also began manufacturing its own cars and locomotives in Altoona. By the end of the century, the shops were renowned as "the largest of their kind in the world," and Altoona was known as the "railroad city."

Following up on Kim Hoagland's survey of the intown area in 1988, five historians worked in Altoona during the summer of 1989, focusing on buildings in the commercial center, and in the neighborhoods of Llyswen and the Fourth Ward. The study areas provided insight into the phases of commercial building in the city and into the history and architecture of a middle-class, streetcar suburb and a working class, urban neighborhood.

Masonic Temple and Charles B. Dudley House

Altoona, Pennsylvania

Project Leaders:

John A. Burns, AIA

Kim Hoagland

Cosponsor:

America's Industrial Heritage Project

Team Members:

K. Edward Lay, Supervisory Architect and Professor, University of Virginia

David Ames, Photographer and Professor, University of Delaware Douglas S. Anderson, Architecture Technician, North Dakota State

University

Robert W. Anthony, III, Architecture Technician, Pennsylvania State

University

Anette A. Jensen, Architecture Technician, Royal Danish Academy of Fine

Arts, Denmark (ICOMOS)

David A. Macharola, Architecture Technician, Pennsylvania State

University

Nancy I. Spiegel, Historian, Yale University

John A. Burns, Photogrammetry, HABS/HAER Washington Office

The Masonic Temple is one of Altoona's few remaining large, red brick, commercial buildings from the nineteenth century. Designed by Philadelphia architect James H. Windrim in 1889, the massive rectangular structure incorporates gables and towers, as well as a variety of window treatments and decorative details. The building was designed to house commercial activities on the first and second floors and Masonic functions on the third and fourth. This division of public and private is reinforced on the interior by separate stairways at the second-floor level and on the exterior by an elaborate decorative band. The historical research uncovered a great deal of graphic information about the original appearance of the building. The measured drawings "restore" the subsequently altered structure to its original appearance. Information on missing features was gleaned from the architect's remaining original drawings, historic photographs, and physical evidence in the building itself.

The Dudley House is an example of Altoona's early two-and-one-half-story brick houses with Italianate detailing. Built in 1872 as rental property, the house was purchased by Dr. Charles B. Dudley in 1896 and occupied by him from 1902 until his death in 1909. As a chemist, Dudley established the Pennsylvania Railroad's testing laboratory in Altoona, pioneering the use of applied science in industry. He was a founder of the American Society of Testing Materials and served as the organization's first president. The house was designated a National Historic Landmark in 1976. Five measured drawings and an historical report complete its documentation. To the extent that supporting evidence could be found, the drawings depict the original appearance of the house.

In addition to measurements taken by hand and from some of the original drawings of the Masonic Temple, both structures were recorded with a recently developed photogrammetric technology that uses a modified 2-1/4" x 2-1/4" roll film camera with a riseau field and a computer to extract dimensional information from the photographs. The system uses three photographic enlargements with converging axes that are digitized and entered into a computer with proprietary software that solves the mathematical algorithms to locate all the camera locations and targeted points in three-dimensional space. The resulting digital information can be converted into Autocad for plotting or further refinement.

There were a total of eighty-four photogrammetric images taken of the Masonic Temple and thirty-six of the Dudley House. Survey control including sketch plans of each structure with each camera location and distance to the subject and target locations and measured distances noted were also compiled. The images were produced as part of a demonstration of the new system.





Left, using a cherry picker to photogrammetrically record the Masonic Temple. Right, close-up view showing Anette Jensen measuring a window, with the assistance of a cherry picker. Photographer: K. Edward Lay

Cambria Iron Works/Mount Etna Iron Works

Fayette County, Pennsylvania

Project Leaders:

Kim Hoagland

G. Gray Fitzsimons

Cosponsor:

America's Industrial Heritage Project

Team Members:

Frances C. Robb, Supervisory Historian, West Virginia University Charles L. Bergengren, Historian, University of Pennsylvania

Christine E. Davis, Historian, University of Pittsburgh Rolla L. Queen, Historian, University of Nevada

Dalius Vrubliauskas, Architect, Institute of Monuments Restoration,

Lithuania (ICOMOS)

Continuing the survey work of the nine counties in the America's Industrial Heritage region, this summer the team historians documented the industrial sites in Fayette County. Located on the southern edge of Pennsylvania, Fayette County was once the center of America's coke industry. The remains of this industry (coke ovens, coal mines, and company towns) are scattered throughout the county. Fayette County was also a leader in the Pennsylvania distilling trade, and several sites were recorded just before the wrecking crew arrived. In addition, the team documented the iron and glass works within the country that comprised the only other non-coke related county-wide industries.

The architects consolidated and completed the measured drawings of the Cambria Iron Works in Johnstown, Pennsylvania. By using the work from previous summer teams, as well as archival drawings from Bethlehem Steel, they have been able to reproduce the structures and mechanical operations of the plant, much of which was torn down years ago. The team also drew the company store and forgeman's cabin at Mt. Etna. This nineteenth-century Blair County iron plantation is just one of many in the Upper Juniata Valley. The drawings of the store and cabin will be added to the work done at Mt. Etna in past years, which included the ironmaster's house, the mule barn, and the tenant house.

East Broad Top Railroad & Coal Company, Machine Shop

Rockhill Furnace, Pennsylvania

Project Leaders:

John A. Burns, AIA

Cosponsor:

America's Industrial Heritage Project

Team Members:

George W. Steinrock, Jr., Supervisory Architect, Philadelphia, Pennsylvania

Lola M. Bennett, Historian, University of Vermont

Richard L. Koochagian, Architecture Technician, University of Tennessee

Christina R. Moon, Architecture Technician, University of Virginia

Elaine G. Pierce, Architecture Technician, Auburn University

Patricia D. Reese, Architecture Technician, Boston Architectural Center Paul J. Skeet, Architect, Essex County Council Planning Department, United

Kingdom (ICOMOS)

The East Broad Top (EBT) Railroad and Coal Company, a National Historic Landmark, is the only surviving narrow-gauge steam railroad still in operation east of the Mississippi River. The EBT was originally chartered on April 16, 1856, for the purpose of extracting and transporting coal from the rich Broad Top Mountain Field. After years of complications, the EBT was formally organized on July 3, 1871. Critical to its success was an amended charter allowing for a connection to the main line of the Pennsylvania Railroad in Mt. Union. The railroad was opened to Rockhill Furnace, Pennsylvania, in 1873, using two Baldwin locomotives named for company Vice President E. D. Roberts and R. D. Wood, for whom the company towns of Robertsdale and Woodvale would also be named. A history of both towns was researched and written by historian Lola Bennett.

In the early 1870s, an extensive shop complex and engine house were built on a former farm site in Rockhill Furnace. The machine shop was the primary focus of this year's recording project. Intact since closing in 1956, the main features of the shop consist of two steam boilers that drive a series of overhead shafts and pulleys. Power is then transferred from the pulleys to some forty machines by a series of leather belts. The EBT was a self-sufficient operation with nearly all repair and maintenance work performed on site. Therefore, machines for general metal and woodworking, such as lathes, planers and bolt-makers, are found alongside machines specific to railroading, such as wheel presses and wheel and axle lathes. In addition, the EBT built their own hopper cars for hauling the coal mined by the parent company, Rockhill Iron and Coal.

Drawings produced this summer will consist of a site plan of the entire shops complex; floor plans and sections of the machine shop/car barn, foundry and blacksmith shop; schematic plans of the steam and compressed air systems, and isometrics of the pulley system and the procedure for removing locomotive wheels for turning on a special lathe.

Photogrammetry Demonstration Project

Washington, D.C.

Project Leader:

John A. Burns, AIA

Cosponsors:

Yellowstone National Park

Mid-Atlantic Regional Office, NPS America's Industrial Heritage Project

Team Members:

Randall Biallas, Deputy Chief Historical Architect, NPS

William Bolger, National Historic Landmarks Coordinator, MARO

David L. Chapman, MARO

John "Jet" Lowe, Photographer, HAER

Tina Van Dyke, HABS/HAER Coordinator, MARO

In 1989, HABS/HAER demonstrated a relatively new photogrammetric technology that uses convergent images (with the camera axes converging rather than parallel as in sterophotogrammetry) and the computational power of a computer to calculate dimensions. HABS/HAER leased a system that uses a modified 2-1/4"x 2-1/4" roll film camera with semi-metric lens and a riseau field, a digitizer table, and proprietary computer software, to extract dimensional information from the photographs. The system digitizes three photographic enlargements with converging axes, entering into the computer a series of points and a known dimension common to all three photographs, as well as camera specifications and the approximate locations of the camera stations. The proprietary software solves the mathematical algorithms to precisely locate all the camera locations and targeted points in three-dimensional space. Once the alignment of the initial points is established, other features in the photographs can be digitized. The resulting computer file can be converted into Autocad for plotting or further refinement.

The primary objective of the demonstration was to produce photogrammetric images as benchmark documentation of some of the primary historic structures of the National Park Service and endangered National Historic Landmarks. In Yellowstone National Park, five National Historic Landmarks--Old Faithful Inn, Fishing Bridge Museum and Ranger Quarters, Madison Museum, Norris Museum, Northeast Entrance Station and Ranger Quarters--plus the Firehole River Bridge were recorded. At Monmouth Battlefield State Park in New Jersey, four endangered National Historic Landmarks were recorded: the Rhea-Gordon House and Barn, the Sutfin-Herbert House, the Conover-Perrine House, and the Craig House and Barn. In Altoona, Pennsylvania, two buildings were photographed by HABS, the Masonic Temple and the Charles B. Dudley House, the latter a National Historic Landmark. At the Chesapeake Bay Maritime Museum in St. Michaels, Maryland, the skipjack E. C. COLLIER was photographed as an adjunct to the hand-measured drawings being produced by HAER. The project produced a total of 1,087 photogrammetric images.

In this fourth year of the HAER maritime initiative, three projects were undertaken to produce documentation on three historic vessels. The three projects produced measured drawings of the E. C. COLLIER, the FALLS OF CLYDE, and the LETTIE G. HOWARD, a National Historic Landmark.

E. C. COLLIER

St. Michaels, Maryland

Chesapeake Bay Maritime Museum

Project Leader:

Richard K. Anderson, Jr.

Cosponsor:

Chesapeake Bay Maritime Museum

Team Members:

Holly A. Olden, Architect, Virginia Polytechnic Institute & State

University

Alan S. Michaels, Architecture Technician, Texas Tech University Stephen D. Koopman, Intern, Chesapeake Bay Maritime Museum, The

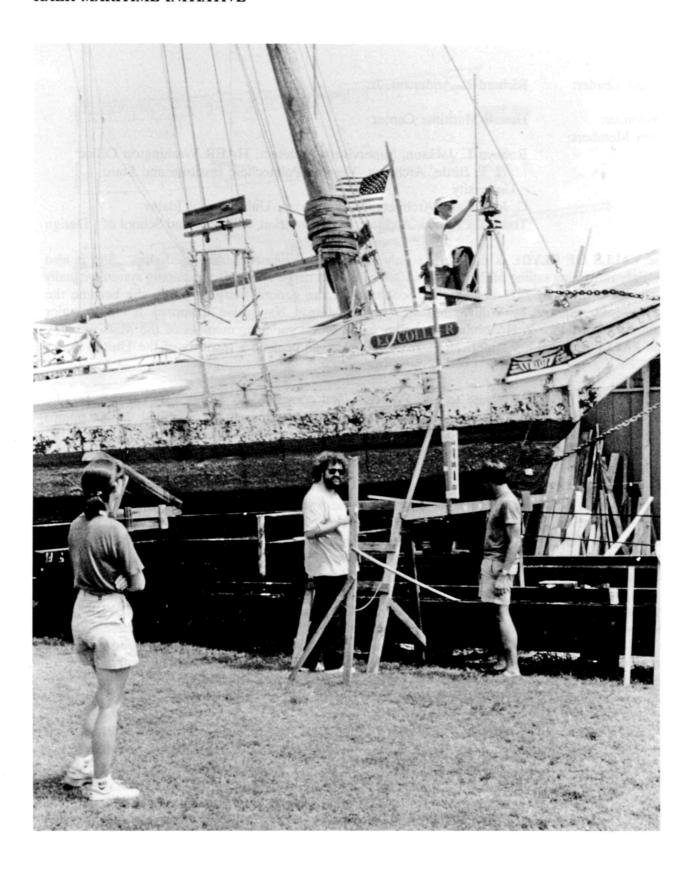
Webb Institute

The E. C. COLLIER was built on Deal Island, Maryland, by George Washington Horseman. She was launched in 1910 and used for oyster dredging on the Chesapeake Bay. During the course of her life, she was patched and repaired frequently, but was never converted to power--by Maryland law, oysters may only be dredged under sail. The E. C. COLLIER continued to work until 1985. She is presently one of the oldest remaining boats in the Maryland oyster-dredging fleet. Recently, the COLLIER and many other skipjacks, have stopped work due to the decline of the oyster harvest.

The E. C. COLLIER was donated to the Chesapeake Bay Maritime Museum in St. Michaels, where she is presently docked. The documentation completed this summer will aid the museum in designing a land-based exhibit for the COLLIER. The HAER team produced lines drawings, outboard profiles, deck and framing plans, construction plans, plus an isometric drawing showing how dredging equipment is used.

Opposite page: Team members prepare to measure the E. C. COLLIER. L-R: Holly Olden, Stephen Koopman, Alan Michaels

and HABS/HAER summer photographer Mark Harrell.



FALLS OF CLYDE

Honolulu, Hawaii

Project Leader:

Richard K. Anderson, Jr.

Cosponsor:

Hawaii Maritime Center

Team Members:

Robbyn L. Jackson, Supervisory Architect, HAER Washington Office Mark T. Bittle, Architect, Virginia Polytechnic Institute and State

University

C. Jean Case, Architecture Technician, University of Idaho

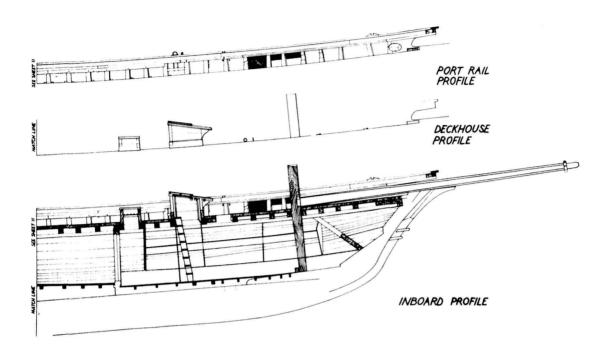
Todd A. Croteau, Architecture Technician, Rhode Island School of Design

The FALLS OF CLYDE is the world's only surviving four-masted, full-rigged ship. She is also the only remaining sailing oil tanker, her state-of-the art cargo and ballast pumping system virtually unchanged. Built in 1878 in Glasgow, Scotland, for the general carrying trade, she became the ninth vessel acquired by William Matson (whose Matson Navigation Company is still a major commercial presence in Honolulu), and today is the oldest surviving member of the Matson Fleet. The FALLS received her American Registry after Hawaii became a territory of the United States in 1898.

In 1907, the FALLS was towed to San Francisco and converted to a bulk cargo tanker for the petroleum trade. A steam system was installed to run two horizontal compound duplex pumps that controlled the level of cargo and ballast in ten large steel oil tanks; pumping out the cargo and regulating the amount of cargo and ballast entering and exiting the ship in order to keep her stable.

In 1922, the FALLS' masts were cut down, and she was converted to a fuel barge for General Petroleum, serving as a floating gas station in Ketchikan, Alaska, until 1959. Between 1959 and 1963, a group led by maritime notables Captain Fred Klebingat, Karl Kortum, Robert Weinstein, and Harold Huyche worked to save her from being scuttled as a breakwater in Seattle, Washington. She was purchased by a Hawaiian group in 1963 and towed to Honolulu to become a museum ship.

During the summer of 1989, measured drawings were produced of the FALLS OF CLYDE boiler room and upper and lower pump rooms. The Hawaii Maritime Center plans to use these drawings to aid them in obtaining a grant to restore these areas and, later on, aid in the restoration and interpretation of the pumping system. Plans are underway to have HAER document the rest of the ship, starting in the summer of 1991.



LETTIE G. HOWARD. Delineators: David M. Small, T. Paul Bates and Stephanie Gelb, 1989

LETTIE G. HOWARD South Street Seaport

New York, New York

Project Leader:

Richard K. Anderson, Jr.

Cosponsor:

South Street Seaport Museum

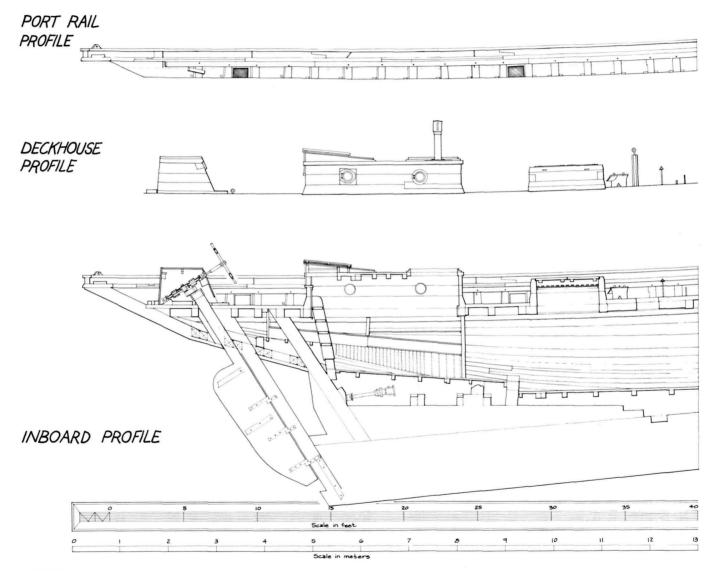
Team Members:

T. Paul Bates, Foreman and Architect, Auburn University David R. Brown, Architecture Technician, Auburn University

William T. Collier, Architect, Auburn University Stephanie Gelb, Architect, New York, New York David M. Small, Architect, Auburn University

Jacqueline A. Salame, Architect, Rensselaer Polytechnic Institute

Built in 1893, in Essex, Massachusetts, to designs by George Melville McLain, the LETTIE G. HOWARD was declared a National Historic Landmark in April 1989. Owned by the South Street Seaport Museum in Manhattan, she is the only surviving Gloucester fishing schooner with a "Freedonia" hull. HAER was called in to make measured drawings, lift lines, and prepare other documentation prior to the ship's complete restoration and return to public exhibition. (The restoration project will be the first to be conducted with State funding under the new Secretary of the Interior's Standards for Historic Vessel Preservation Projects.)



LETTIE G. HOWARD. Delineators: David M. Small, T. Paul Bates and Stephanie Gelb, 1989

Lighthouses of the Apostle Islands National Lakeshore

Bayfield, Wisconsin

Project Leader:

Paul D. Dolinsky

Cosponsors:

Midwest Regional Office, NPS

Apostle Islands National Lakeshore

Team Members:

Douglas R. Mighell, Supervisory Architect, University of Colorado, Denver

Richard S. Naab, Foreman, Architecture Technician, The Catholic University

of America

Leah C. Greenblat, Landscape Architecture Technician, University of

California, Berkeley

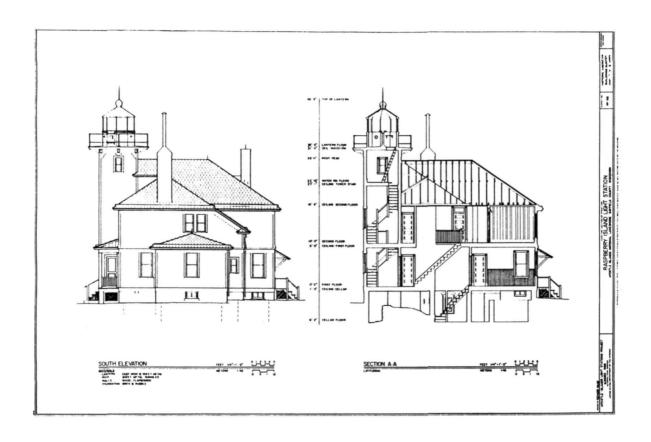
Lisa Monnig, Architecture Technician, University of Utah

Gary R. Stephens, Architecture Technician, Texas Tech University

The Apostle Islands, located off the Bayfield Peninsula in northern Wisconsin, were named by early French missionaries who thought there were twelve islands; the actual number is twenty-two. With the opening of the 500 locks, connecting Lake Superior with the lower Great Lakes, came increased shipping traffic. Trade in the region's valuable raw materials of iron ore, lumber and brownstone brought growth to the ports of Bayfield, Washburn and Ashland. To insure the safety of ships passing around and through the cluster of islands, the Federal Government built light stations on six of the islands.

Each of the light stations on the Apostle Islands is a unique structure in design and material use, and they all represent a rich history of a time when the lighthouse service helped guide the way for mariners passing through Lake Superior's often treacherous waters.

The first of a two year project, this summer's documentation consisted of complete sets of plans, elevations and sections of Raspberry and Sand Island light stations. In addition, the overall title sheet for all the light stations was nearly completed. In all, the team produced fourteen sheets, documenting three buildings.





Above, South elevation of Raspberry Island Lighthouse. Delineator: Richard Naab, 1989

At left, Raspberry Island Lighthouse at night. Photographer: Douglas R. Mighell

Cape Hatteras Lighthouse

Project Leader:

Paul D. Dolinsky

Cosponsor:

Southeast Regional Office, NPS Cape Hatteras National Seashore

Team Members:

Frederick J. Lindstrom, Supervisory Architect, HABS/HAER Washington

Office

Timothy A. Buehner, Architect, HABS/HAER Washington Office Judith E. Collins, Architecture Technician, Auburn University

Thomas P. Forde, Jr., Architecture Technician, Virginia Polytechnic Institute

and State University

The lighthouse at Cape Hatteras was first established in 1803 by a congressional mandate. The existing tower of 1868 is the second to be built on the cape, at 190 feet above the sea. It is 30 feet higher than its predecessor and is the tallest brick light tower in the world. Despite construction problems, the first-order lens was lit on September 17, 1870. The tower was painted with the distinctive black and white spiral stripes in 1873 to increase its visibility as a daymark. The Lighthouse Bureau turned the light station over to the National Park Service in 1936, to be included in the Cape Hatteras National Seashore and, at that time, removed the light to a new skeleton tower. In 1950, the U.S. Coast Guard returned the lamp to the tower and automated it. Because the tower is now threatened by erosion, there are several plans to lift it and move it inland to a more stable site.

The site documentation will be completed in September and the final ink drawings will be produced from the field notes this fall in the HABS Washington office.

Dumbarton Oaks Park

Washington, D.C.

Project Leader:

Paul D. Dolinsky

Cosponsor:

National Capital Region, NPS

Rock Creek Park

Team Members:

Andrew Wenchel, ASLA, Supervisory Landscape Architect, Washington, D.C.

Steven E. Ashworth, Landscape Architecture Technician, Iowa State

University

Thomas P. Forde, Architecture Technician, Virginia Polytechnic Institute

and State University

Jakub Zemla, Landscape Architect, The Board of Historical Gardens and

Palaces Conservation, Poland (ICOMOS)

The focal point of Dumbarton Oaks Park--a 27-acre landscaped retreat in a crowded urban residential district of Washington, D.C.--is a winding stream valley that was transformed into a romantic setting, beginning in 1921-22. Noted landscape architect Beatriz Ferrand, working with Mildred and Robert Woods Bliss, who acquired the Georgetown property in 1920, designed a composition of formal and informal garden elements behind the Georgian-styled Dumbarton Oaks mansion. Ferrand, one of the eleven founding members of the American Society of Landscape Architects, blended a composition founded on tiered Italianate gardens with the subtlety and color of the English flower garden tradition. Her work at the site continued until 1946. The lower garden, which abuts Rock Creek Park, was given to the National Park Service in 1941, while the balance of the Dumbarton Oaks Estate went to Harvard University.

The lower garden, that portion of the park that was documented this year, is highlighted by the winding stream that Ferrand enhanced with waterfalls, stone bridges, a grotto, and a waterwheel. The surrounding topography included other picturesque elements such as fields and meadows, crisscrossed by a bridle path and an arbor, all emphasized through the predominant use of native planting.

The project was the second of a two-year study of the park and a continuation of HABS's landscape architecture documentation pilot. Dumbarton Oaks Park is an excellent example of the naturalistic tradition of landscape.



DUMBARTON OAKS PARK. *Above*, stone bridge. *Below*, using a plane table to survey the landscape are, l-r, Thomas Forde, Paul Dolinsky (project leader), Jacob Zemla and Andy Wenchel. Photographer: Jack E. Boucher



El Morro

Old San Juan, Puerto Rico

San Juan National Historic Site

Project Leader:

Paul D. Dolinsky

Cosponsors:

Southeast Regional Office, NPS San Juan National Historic Site

Team Members:

John P. White, Supervisor, Professor of Architecture, Texas Tech

University

Erick Chaves, Architecture Technician, University of Costa Rica (ICOMOS) Christopher M. Huckabee, Architecture Technician, Texas Tech University

Jacqueline A. Salame, Architect, Rensselaer Polytechnic Institute

Raymond M. Wiencek, Architecture Technician, Miami (Ohio) University

When Castillo de San Felipe del Morro was first constructed, it provided little protection to the city of San Juan. In 1591, major defense work was undertaken in an attempt to protect the fort from inland attack. Major reconstruction of the city's military defenses was undertaken in the late eighteenth century, so that by 1783 El Morro became the formidable structure which stands today. The fort is a part of a World Heritage Site and a National Historic Site.

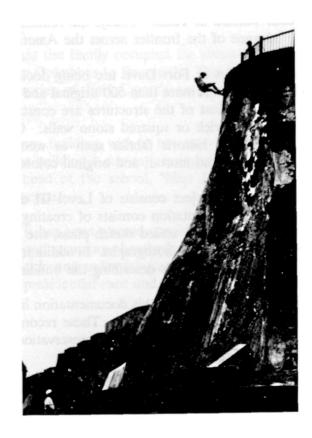
1989 is the sixth year of the recording program to document the historic fortifications associated with San Juan National Historic site. This summer, the five-member team is completing floor plans, sections and developing elevations of Castillo San Felipe del Morro.

The team completed nine sheets of drawings initiated in 1988, including inking several of the sheets completely. They also generated thirteen sheets of new drawings, including measurements. The complete set of thirty-five sheets of drawings was completely coordinated, finishing six years of recording in Old San Juan, three of which were spent at El Morro (1987, 1988, 1989). The drawings produced will assist the Southeast Preservation Center in the preparation of a historic structures report.



EL MORRO. Jacqueline Salame (I) jots down readings translated by Erick Chaves (r) from the theodolite. *Background*, Matt Wiencek (I) and Chris Huckabee (r) work with target.

Photographer: John White



EL MORRO. Matthew Wiencek rappels down wall of the floating battery; Jacqueline Salame at top. Photographer: John White

Fort Davis NHS

Fort Davis, Texas

Project Leader:

Paul D. Dolinsky

Cosponsors:

Southwest Regional Office, National Park Service

Fort Davis NHS

Team Members:

Robert R. Arzola, Supervisory Architect, Texas Tech University Pamela J. Burdick, Architecture Technician, University of Illinois

at Chicago Circle

William J. Lindstrom, Architecture Technician, Texas A&M University

Located at the eastern base of the scenic Davis Mountains in west Texas, Fort Davis guarded the Trans-Pecos segment of the southern route to California. From 1854 to 1891, except for the Civil War years, units of the U.S. Army garrisoned this remote post beyond the frontiers of Texas. They patrolled the San Antonio-El Paso road, escorted stagecoaches, guarded mail relay stations, policed the Mexican border, and skirmished with Comanche and Apache warriors whose raiding trails to Mexico crossed the deserts of west Texas. Troops stationed at Fort Davis played a major role in the campaigns against the Apache Chieftain Victorio, whose death in 1880 terminated Indian warfare in Texas. Today, the remains of Fort Davis commemorate a significant phase of the advance of the frontier across the American continent.

The structures at Fort Davis are being documented because of their historic and cultural value. The site contains more than 500 original and reconstructed structures as well as archeological sites and ruins. Most of the structures are constructed on random or squared stone foundations and have adobe brick or squared stone walls. Of significant importance are those structures which retain original historic fabrics such as wood floors, ceilings and moldings, adobe bricks with limestone or mud mortar, and original colored stucco.

The six-week project consists of Level III documentation on forty-six of the historic structures. Level III documentation consists of creating a package for each structure that contains detailed field measurements, scaled sketch plans, site plan sketches, site section sketches, and 35mm black and white and color photographs. In addition, a detailed description, identifying historic fabrics and other significant details describing the buildings as they exist today, is written.

The primary purpose of this documentation is to assist in the preservation and restoration of these nationally significant resources. These records will provide experts with baseline data, which will be used in the development of a preservation and restoration plan for the site.

Jimmy Carter NHS and Preservation District

Plains, Georgia

Project Leader:

Paul D. Dolinsky

Cosponsors:

Southeast Regional Office, National Park Service

Jimmy Carter National Historic Site

Team Members:

John H. Westberg, Supervisory Architect, Arizona State University

Elizabeth J. Barthold, Historian, American University

Jason B. Breyer, Architecture Technician, North Dakota State University Sara Amy Leach, Supervisory Historian, HABS/HAER Washington Office Dana A. Peak, Architecture Technician, University of California, Davis Dale O. Waldron, Architecture Technician, Rhode Island School of Design

The drawings completed this summer represent the places that shaped Jimmy Carter's life--his boyhood home, the Carter store, Plains High School. They also represent the impact of those places on his career--especially the Plains train depot, from which Carter conducted two presidential campaigns. What is significant about this project is the lack of intrinsic architectural significance of the buildings. Wonderful and simple like a thousand other small towns in the United States, the cultural history of this one outweighs the architectural significance of its buildings.

The boyhood home is a large bungalow (c. 1910) that the family occupied for about twenty years, which historically was adjacent to the major road from Columbus to Savannah. The store is just 100 feet to the east along the road; there are many stories of Earl Carter's entrepreneurial efforts, experiments and successes here.

The Plains High School (c. 1921) is a brick masonry building with a two-story central pavilion, symmetrical single story wings, and an auditorium. The building is currently being stabilized for future renovation. All grades were taught here and the head of the school, "Miss Julia" is thoroughly acknowledged by Carter as having been a major influence.

Construction on the train depot began in the 1880s; it has been altered considerably over the years, and leans in every direction. The depot is a light wood structure sheathed in board and batten on the warehouse portion, and shiplap clapboards on the ticketing and waiting area section. This building served as campaign headquarters for Jimmy Carter's presidential race and is now the visitor's center and museum of the campaign.



The HABS team spent some of their time getting to know the Carters. (Above), Pictured from left to right: Elizabeth Barthold, Dana Peak, Rosalyn and Jimmy Carter, John Westburg, Jason Breyer, and Dale Waldron, gathered in front of the Maranatha Baptist Church, where the Carters attend services regularly and teach Sunday School. Photographer: Mrs. Judith Peak

Oregon Caves National Monument and Crater Lake National Park

Crater Lake, Oregon

Project Leader:

Paul D. Dolinsky

Cosponsor:

Pacific Northwest Regional Office, NPS

Team Members:

Kurt M. Klimt, Supervisory Architect, University of Kansas

Michael D. Egan, Landscape Architecture Technician, Oklahoma State

University

John T. Nicely, Landscape Architecture Technician, West Virginia

University

Belinda Sosa, Architecture Technician, Tulane University

Documented this summer at the Oregon Caves National Monument were the chateau, chalet, and ranger residence. Clustered near the cave entrance in a steep ravine, the monument's buildings and landscaping are a notable attempt to fit rustic development into the rugged surroundings. The first two structures are owned and operated by the monument's concessioner, while the third is a National Park Service property. A distinctive feature of all three buildings is the use of Port Orford-cedar bark as sheathing, something that has been utilized throughout Oregon Caves National Monument.

The cave was discovered in 1874 and declared a national monument in 1909. Its potential as a tourist attraction was a driving force behind this designation, but a lack of roads in the area postponed permanent improvements until 1922. Concession development began under U.S. Forest Service administration and was well underway when the National Park Service assumed jurisdiction in late 1933. Most of the landscaping was done by a Civilian Conservation Corps crew, under the direction of NPS landscape architects, who continued with a rustic design ethic established by the concessioner.

Also documented by the HABS team this summer was the Munson Valley Park Headquarters in Crater Lake National Park. Sixteen buildings in this area are included in the Munson Valley National Historic District.

Site plans of the area as well as detailed site analysis of specific areas, such as the administrative center and the superintendent's residence, are included in the recording. Detail plans of the latter include botanical planting plans, as well as roof plans and landscaping features such as paving, planters, etc. A brief historical state of significance specific to the Crater Lake National Park-Munson Valley recording project was also completed.

A total of thirteen detailed sheets and sixteen specific drawings were produced as a result of these projects.

Photodocumentation Project

Prince George's County, Maryland

Project Leaders:

Gail Rothrock, Prince George's County Historic Preservation Commission

Catherine C. Lavoie

Cosponsors:

Prince George's County Historic Preservation Commission (HPC)

Maryland National Capital Park & Planning Commission

Assistants:

Susan G. Pearl, Research Historian, HPC Jack E. Boucher, Photographer, HABS

In January 1989, a cooperative agreement was entered into between the Maryland National Capital Park & Planning Commission and HABS, on behalf of the Prince George's County Historic Preservation Commission, to document select sites throughout the county. The project, spanning one year, entailed large format photographs, accompanied by historical reports. It was the first project of its kind, in which HABS worked with a local government to document a select representation of a county's historic architecture. The large format photography was undertaken by Boucher. The historical reports were prepared by Rothrock and Pearl, who also provided access to their historical research and information on file at the HPC, as well as their extensive knowledge of the county's history. Lavoie will be responsible for the transmittal of approximately forty sites to the HABS collection. The project, still underway, has met with such success that the HPC has agreed to cosponsor a second year.

Pinon Canyon

Pinon Canyon, Colorado

Project Leaders:

Tom Keohan, Historical Architect, RMRO

Gregory Kendrick, Historian, RMRO

Cosponsors:

U. S. Department of the Army

Rocky Mountain Regional Office, NPS

Team Members:

Alfonso Narvaez, Project Supervisor

James Duran, Architectural Technician, University of New Mexico John Kirkpatrick, Architectural Technician, University of New Mexico

Eric Miller, Architectural Technician, University of Colorado Michelle McFadden, Historian, University of Delaware

Michelle McFadden, Historian, University of Delaware

Al Wiater, Historian, Arizona State University

The surviving homesteads and ranches of Pinon Canyon, a 380-square-mile area located between Trinidad and La Junta, Colorado, illustrate one of the last agricultural frontiers to be homesteaded in the southwestern United States. Originally settled by Hispanics in the 1860s, Anglo pioneers began to arrive in the 1870s. Their efforts at dry farming failed, and many left. The vacated property was purchased by the few cattle and sheep ranchers in the area, who utilized the semi-arid land more successfully by grazing. A second wave of homesteaders during the 1910s and 1920s, encouraged by the Enlarged Homesteading Act of 1909 which enabled claims of up to 320 acres, also resulted in disappointment.

The ranches are illustrative of the shifting fortunes and history of southeastern Colorado. The vernacular buildings which remain reflect the blending of two cultural landscapes, that of Hispanic New Mexico and the High Plains. Seven ranches in Pinon Canyon, listed in the National Register of Historic Places, include more than sixty buildings. The residences and outbuildings-including barns, garages, dugout cellars, and sheds-represent a wide variety of vernacular construction techniques and forms. Adobe and jacal, upright cedar posts embedded in the ground and daubed with adobe, are Hispanic construction methods found in both Anglo and Hispanic homesteads. Stone and milled lumber were also employed. Hispanic forms also include the alto, the space under a gable roof accessible only from the exterior, flat roofs, and linear house plans. The most distinctive Anglo feature is the segmentally arched roof; it was adopted from the form found on the High Plains. The architecture reflects the reciprocating influences of the two building traditions, often within the same homestead or even within the same building. The ranches document the periods of boom and depression, the need for conservation of scarce resources, of family history, and the southwest frontier region.

Red Hill
Patrick Henry National Memorial

Brookneal, Virginia

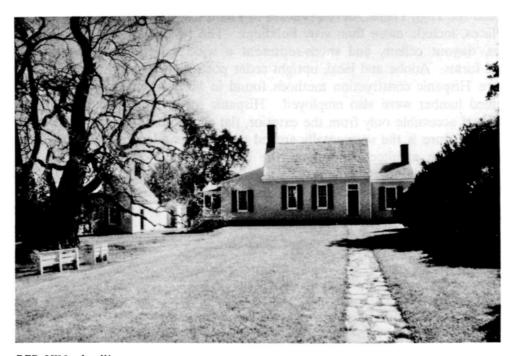
Project Leader: Sara Amy Leach

Cosponsor: Patrick Henry Memorial Foundation

Team Member: Kevin R. Hardwick, Historian, University of Maryland

Red Hill, the last residence of Patrick Henry--noted orator, lawyer and governor of Virginia--is a modest plantation in southern Virginia that was designated a National Memorial in 1986. The site is composed of a dwelling and Henry's law office, as well as outbuildings that include a kitchen, privy, smokehouse, and slave cabin. These were occupied by Henry from the time of its purchase by him in 1794, until his death in 1799. The property remained in the Henry family until the early twentieth century, during which time it witnessed two major episodes of additions that greatly altered the buildings. In 1919, the main house burned, but it was not until 1956-57 that the dwelling was reconstructed and the property returned to its speculative appearance of 1799.

Because the buildings themselves are not original, historical research focused on locating and compiling information about the eighteenth-century appearance of Red Hill and its environment, and Henry's occupation of it. This summer's project was largely devoted to the production of a comprehensive overview of Patrick Henry's role as a politician and legislator during a politically turbulent era, his role as a landowner, planter and member of the early American gentry, and how these factors influenced his material surroundings at Red Hill. In addition to this overview, seven individual HABS building reports were produced.



RED HILL, dwelling.

Photographer: Frederick Lindstrom

Ropewalk Building

Boston, Massachusetts

Project Leader:

Paul D. Dolinsky

Blaine Cliver, North Atlantic Preservation Center, NPS

Cosponsor:

North Atlantic Preservation Center, NPS

Team Members:

Stephen Schreiber, Supervisor, Miami, Florida

M. Kristin Andres, Architecture Technician, Virginia Polytechnic Institute

and State University

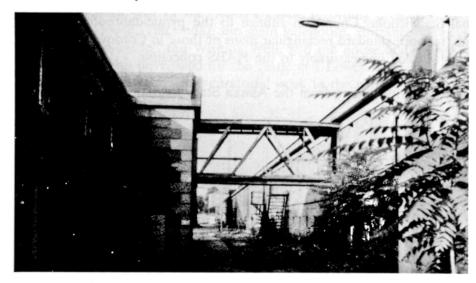
Daniel J. Lind, Architecture Technician, North Dakota State University

The Ropewalk Recording Project documented two buildings in Boston's Charlestown Navy Yard. The two structures, the Ropewalk and the Tar House, were the core of the yard's ropemanufacturing complex, which produced most of the U.S. Navy's cordage from 1838 to 1970. The Ropewalk is the only building of its type in the United States, which has not been significantly altered or moved from its original site. The Tar House is among the least changed buildings in the historic Navy Yard.

The granite-faced brick buildings were constructed from the plans of Alexander Parris between 1834 and 1838. Parris, a leading Boston architect of the era, is best known for his design of Quincy Marketplace.

Rope, up to a quarter-mile long, could be manufactured inside the 45' x 1,360' building. Innovative machinery, engines, and boilers were designed for the building by the engineer and inventor Daniel Treadwell.

Both the Ropewalk and the Tar House were acquired by the Boston Redevelopment Authority when the Navy Yard closed in 1973. The abandoned buildings have been damaged by extensive vandalism and decay.



Tar House at left and Ropewalk on the right. Photographer: Stephen Schreiber

Russian Orthodox Churches

Pribilof Islands and Unalaska, Alaska

Project Leaders:

Steve Peterson, Alaska Regional Office, NPS

Kim Hoagland

Cosponsors:

Alaska Regional Office, NPS

Icon Preservation Task Force

Assistants:

Andrew Feinberg, Architect, University of Oregon

Ray Todd, Architect, University of Oregon

Aleksej Lashkevich, Architect, L. E. Repin Institute of Painting, Sculpture

and Architecture, Leningrad (ICOMOS)

Lydia Velichko, Architect, Spetsproyectrestavratsiya Institute, Moscow

(ICOMOS)

John "Jet" Lowe, Photographer, HAER

A multi-year effort to document Russian Orthodox churches in Alaska was begun this year under the direction of Steve Peterson. With funding from the Alaska Regional Office, HABS/HAER/WASO, and the Icon Preservation Task Force, fifteen churches were documented. Although no free-standing churches survive from the period of Russian occupancy, the natives continue to adhere to the Russian Orthodox faith, and the churches they have built necessarily incorporate traditional Russian elements.

The architects undertook measured drawings of three churches, St. Paul and St. George in the Pribilof Islands and the Church of the Holy Ascension in Unalaska on the Aleutian Islands. Photographs of fourteen churches were taken by Jet Lowe, accompanied by Kim Hoagland. Ranging from the octagonal St. Nicholas Church in Juneau to the pyramidal-roofed chapel at Monk's Lagoon near Kodiak, to more standard rectangular plans of those in Cordova and Akhiok, the photographs and histories will add immeasurably to the HABS collection.

In 1990, the project will continue with funding from the Alaska State Legislature.

Scotty's Castle

Death Valley, California

Death Valley National Monument

Project Leader:

Paul D. Dolinsky

Cosponsors:

Western Regional Office, National Park Service

Death Valley National Monument

Team Members:

Joseph D. Balachowski. Supervisory Architect, HABS/HAER Washington

office

Sam R. Coker, Architecture Technician, Auburn University

Kelley L. Donnelly, Architecture Technician, Virginia Polytechnic

Institute and State University

Joseph R. Esposito, Landscape Architecture Technician, University of

Texas at Arlington

Mark A. Radven, Architecture Technician, Texas Tech University

Lisbet S. Rosshaug, Architecture Technician, Royal Danish Academy of Fine

Arts, Copenhagen, Denmark (US-ICOMOS)

Scotty's Castle was built by Albert Johnson, a Chicago financier, between 1922 and 1931, when the Depression brought all work to a halt. The Spanish Mediterranean-style buildings are of wood frame and stucco construction, and make extensive use of redwood, wrought iron, tile, native stone and concrete. The striking contrast between the oasis-like setting, opulent interior furnishings and ornamentation, and the arid environment of Death Valley has made this documentation effort unique among HABS projects.

This was the third year of the Scotty's Castle recording project. The team completed drawings of the Guest House (Hacienda); the main gatehouse, Entrance Gates and Dungeon Apartments; Scotty's "original castle;" the Wishing Well, and the house and garage at the Lower Vine Ranch. Site plans were also developed for the castle and Lower Vine sites. The drawings are being used in continuous preservation and curatorial work in the castle complex.

*DEATH*VALLEY*RANCH*

WALTER SCOTT - POPULARLY KNOWN AS "DEATH VALLEY SCOTTY"- WAS BORN IN 1872 IN KENTUCKY, THE SON OF A HORSE TRAINER AND BREEDER. AS A BOY HE TRAVELED TO DEATH VALLEY, CALIFORNIA, AND WORKED ON 20-MULE TEAM WAGONS HAULING BORAX, A MINERAL USED IN THE MANUFACTURE OF CLEANSING AGENTS AND PRESERVATIVES. IN 1890 HE WAS DISCOVERED BY BUFFALO BILL'S WILD WEST SHOW WHERE HE WORKED AS A ROPER, SHOOTER AND TRICK RIDER AFTER IT YEARS WITH THE SHOW, HE BEGAN SEEKING INVESTORS FOR NON-EXISTENT GOLD-MINING OPERATIONS IN 1904 HE MET ALBERT JOHNSON, A CHICAGO INSURANCE EXECUTIVE. THE TWO MEN BECAME FRIENDS AND BUSINESS ASSOCIATES, ALTHOUGH JOHNSON'S ONLY PROFIT WAS ENTERTAINMENT FROM SCOTT'S STORIES, AS WELL AS THE REMARKABLE IMPROVEMENT IN HIS HEALTH AFTER SEVERAL VISITS TO DEATH VALLEY. BY 1915 JOHNSON HAD DECIDED TO SPEND A PORTION OF EACH WINTER IN THE DESERT. HIS WIFE, BESSIE, INSISTED ON A PROPER HOME SUITABLE FOR ENTERTAINING

CONSTRUCTION OF DEATH VALLEY RANCH BEGAN IN 1922 THROUGHOUT THE TEN-YEAR CONSTRUCTION PERIOD, SCOTT REFERRED TO THE BUILDING AS "MY CASTLE," AND IT SOON BECAME KNOWN AS "SCOTTY'S CASTLE" BY 1925 DEATH VALLEY RANCH CONSISTED OF A LARGE MAIN BUILDING CONTAINING THE JOHNSON'S APARTMENT, A GARAGE WITH ATTACHED SHED, CHICKEN COOP AND BUNKHOUSE, A COOKHOUSE, STABLES AND SEVERAL STRUCTURES REMAINING FROM PREVIOUS LANDOWNERS. IN 1926, ARCHITECT CHARLES ALEXANDER MacNEILLEDGE OF LOS ANGELES, WAS HIRED TO REDESIGN THE MAIN HOUSE, INCLUDING MANY OF ITS FURNISHINGS AND ORNAMENTS. HIS WORK CONTINUED ON OTHER STRUCTURES THROUGHOUT THE CONSTRUCTION WHEN WORK CEASED IN 1931, THE COMPLEX CONTAINED MORE THAN 31,000 SQUARE FEET OF FLOOR SPACE IN ADDITION TO THE CASTLE AND ANNEX, THE COMPLEX INCLUDES STABLES, A GUEST HOUSE (ALSO CALLED THE "HACIENDA"), THE COOK HOUSE, THE GAS TANK HOUSE AND SERVICE STATION, THE POWERHOUSE, THE CHIMES TOWER, THE GATEHOUSE APARTMENT, THE LONG SHED BUNKHOUSE (MOTEL"), "SCOTTY'S ORIGINAL CASTLE," AND AN UNFINISHED SWIMMING POOL

THE BUILDINGS ARE WOOD-FRAME CONSTRUCTION WITH STRUCTURAL TILES AND BRICK; RED ROOFING TILES AND STUCCO COMPLETE THE SPANISH MEDITERRANEAN EXTERIORS THE CASTLE IS ALSO ADORNED WITH IMPORTED, HAND-CARVED FURNITURE, EUROPEAN ARTWORK, TILES, WROUGHT IRON AND REDWOOD MANY OF THE FURNISHINGS AND FIXTURES RELECT A DESERT MOTIF BY INCORPORATING THE IMAGES REGIONAL FAUNA AND FLORA IN THEIR DESIGN

THE MUSIC ROOM CONTAINS A CUSTOM BUILT THEATER ORGAN. A PELTON WATER WHEEL AND DIESEL GENERATOR PROVIDE ELECTRICITY; A SOLAR WATER HEATER ON THE HILL BEHIND THE CASTLE ANNEX IS NO LONGER FUNCTIONAL

JOSHUA TREES, CACTI, OCATILLO AND OTHER SUCCULENTS CAN BE FOUND NEAR MANY OF THE BUILDINGS. COTTONWOODS, MESQUITE AND JUNIPER ARE COMMON IN THE REGION, DATE PALMS AND MULBERRY TREES WERE INTRODUCED IN THE 1920s GRAPEVINES GROW IN ARUNDANCE ALONG THE SOUTHERN BOUNDARY OF THE SITE A SPRING IN THE CANYON ABOVE SCOTTY'S CASTLE PROVIDES AN AMPLE YEAR-ROUND WATER SUPPLY

THE SCOTTY'S CASTLE RECORDING PROJECT AT DEATH VALLEY NATIONAL MONUMENT, CALIFORNIA, WAS UNDERTAKEN DURING THE SUMMERS 1987-89 BY THE HISTORIC AMERICAN BUILDINGS SURVEY (HABS) DIVISION OF THE NATIONAL PARK SERVICE, AND CO-SPONSORED BY THE WESTERN REGIONAL OFFICE OF THE NATIONAL PARK SERVICE. PRINCIPALS INVOLVED WERE ROBERT J KAPSCH, CHIEF HABS/HAER; KENNETH L. ANDERSON, AIA, CHIEF OF HABS AND PROJECT LEADER IN 1987 AND 1988, PAUL D. DOLINSKY, PRINCIPAL ARCHITECT OF HABS AND PROJECT LEADER IN 1989.

CASTLE)

S

(SCOTTY

RANCH

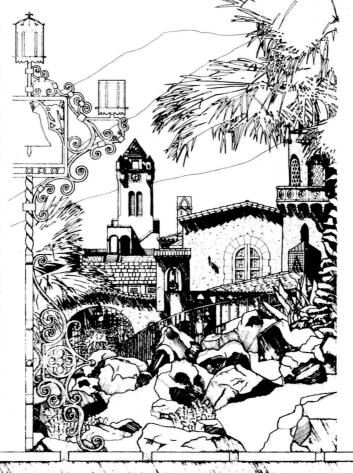
VALLEY

DEATH

THE DOCUMENTATION WAS PRODUCED AT DEATH VALLEY IN 1987 BY MARLYS B. THURBER, ARCHITECT AND SUPERVISOR, ARCHITECTURAL TECHNICIANS MATTHEW Y. LEE, MISSISSIPPI STATE UNIVERSITY, TROY D. THOMPSON, BALL STATE UNIVERSITY, CHARLOTTE A. THROOP, TULANE UNIVERSITY, AND HISTORIAN RICHARD A. BERNSTEIN, CORNELL UNIVERSITY.

THE 1988 DOCUMENTATION WAS PRODUCED BY PROFESSOR JOHN WHITE, SUPERVISOR AND ARCHITECT, TEXAS TECH UNIVERSITY, ARCHITECTURAL TECHNICIANS RONALD M. BAILEY, CATHOLIC UNIVERSITY OF AMERICA, GORDON P. BINGAMAN, TEXAS ABM UNIVERSITY; JAN ENGLE, TEXAS TECH UNIVERSITY, SCOTT WESTON, COLUMBIA UNIVERSITY; AND HISTORIAN HOLLY K CHAMBERLAIN, HABS/HAER WASHINGTON OFFICE

THE 1989 DOCUMENTATION WAS PRODUCED BY JOSEPH D. BALACHOWSKI, ARCHITECT AND SUPERVISOR, HABSMAER WASHINGTON OFFICE: ARCHITECTURAL TECHNICIANS SAM R COKER, AUBURN UNIVERSITY; KELLY L. DONNELLY, VIRGINIA POLYTECHNICAL INSTITUTE AND STATE UNIVERSITY, JOSEPH R. ESPOSITO, LANDSCAPE ARCHITECTURAL TECHNICIAN, UNIVERSITY OF TEXAS AT ARLINGTON; MARK A. RADVEN, TEXAS TECH UNIVERSITY, AND LISBET S. ROSSHAUG, ROYAL DANISH ACADEMY OF FINE ARTS, COPENHAGEN (US-ICOMOS, DENMARK)



Sleeping Bear Dunes National Lakeshore

Empire, Michigan

Project Leader:

Paul D. Dolinsky

Cosponsor:

Sleeping Bear Dunes National Lakeshore

Midwest Regional Office, NPS

Team Members:

Richard Hayes, Supervisory Architect, Champaign, Illinois

Jeanette S. Barras, Architecture Technician, University of Southwestern

Louisiana

Miguel Sabat, Architecture Technician, University of Maryland

Robert Score, Architecture Technician, Lawrence Institute of Technology

In 1970, Congress authorized the 71,000 acres along the northeastern shore of Lake Michigan as the Sleeping Bear Dunes National Lakeshore. The legislation highlighted certain outstanding natural features including forests, beaches, dune formations, and ancient glacial phenomenon. This area also included significant cultural resources, which will be documented by HABS during a multi-year project.

During the summer of 1989, HABS focused on the cultural resources on North Manitou Island. More than 50 buildings on the island were built for logging, farming, maritime, or recreational purposes and, in the nineteenth century, the island served as a wood refueling station for European steamers traveling through the Great Lakes. North Manitou Village, a linear development of summer recreational cottages, was built in the 1890s; and it is this elaborate complex of structures that HABS will document with plans, streetscapes, details, and a site plan.

Virginia State Capitol

Richmond, Virginia

Project Leader:

Paul D. Dolinsky

Cosponsor:

Department of General Services, Commonwealth of Virginia

Team Members:

Frederick J. Lindstrom, Supervisory Architect, HABS/HAER Washington

Office

Judith E. Collins, Architecture Technician, Auburn University

Hugh D. Hughes, Architect, HABS Washington Office and the U.S.S.R.

B. Carolyn Parler, Architecture Technician, Tulane University Gerhard Pfundner, Architect, Technical University Vienna, Austria

(ICOMOS)

The Virginia State Capitol is the second-oldest state capitol in the United States. Originally conceived in 1785 and designed by Thomas Jefferson while he was in France, the building was modeled after the Roman temple, the Maison Carrée. The structure remained relatively unchanged until 1906, when it was renovated and enlarged by the addition of front steps and two wings to house the growing Senate and House of Delegates.

This is the second and final year of the Virginia State Capitol Recording Project and the third year for HABS in Capitol Square in Richmond. This summer's team concentrated on documenting and delineating the exterior elevations of both the original Jefferson-designed building and the 1906 additions. The east-west section of the rotunda and the details of the original building have also been measured and drawn. This year's efforts, combined with last year's work, will produce a comprehensive documentation package that will include not only the measured drawings but a chronological history of the renovations from 1785 to 1964, 35mm field photography, and Jack E. Boucher's large-format black and white photography.



L-R: Gerhard Pfundner, Frederick Lindstrom and Paul Dolinsky review section drawings of the Virginia State Capitol. Photographer: Jack Boucher

The White House

Washington, D.C.

Project Leader:

Paul D. Dolinsky

Cosponsors:

Executive Residence

National Capital Region, NPS

Team Members:

Timothy A. Buehner, Supervisory Architect, HABS Washington Office

Krista A. Minotti, Architecture Technician, Auburn University

Brian F. Pederson, Architecture Technician, North Dakota State University

Isabel Chia-Yi Yang, Architectural Foreman, University of Maryland

The White House, as part of its exterior restoration project, began a five-year documentation project in 1988 to systematically record and update existing drawings on the exterior stonework.

Built of Aquia Creek sandstone, the White House was always intended to be painted, but many years of paint obscured the stone's detail and ornament. As the White House removes 200 years of paint and replaces damaged stone, HABS is recording the structure with photographs and measured drawings that will show the stone in full detail.

This was the second year of recording. This year's team continued to add field notes and produce the base drawings, which will be photographically reproduced and used to record the graining patterns and deterioration of the exposed stone.

The drawings produced this year were of all four elevations with and without porticos, typical stone details on the doors and windows, and of the Presidential Park site plan.

HAER PROJECTS

Avery Island Salt Works

Avery Island, Louisiana

Project Leader:

Eric N. DeLony

Cosponsors:

Avery Island Inc.

AKZO Salt Inc.

Team Members:

Dan P. Branch, AIA, Supervisory Architect, Professor of Architecture,

University of Southwestern Louisiana, Lafayette

Darren A. Deffner, Architecture Technician, Louisiana Tech University,

Ruston

Mercedes G. Maceda, Architect, University of Buenos Aires, Buenos

Aires, Argentina (ICOMOS)

Kirsten A. Kingsley, Architecture Technician, University of Illinois,

Champaign-Urbana

John A. Montgomery, Architectural Foreman, University of Southwestern

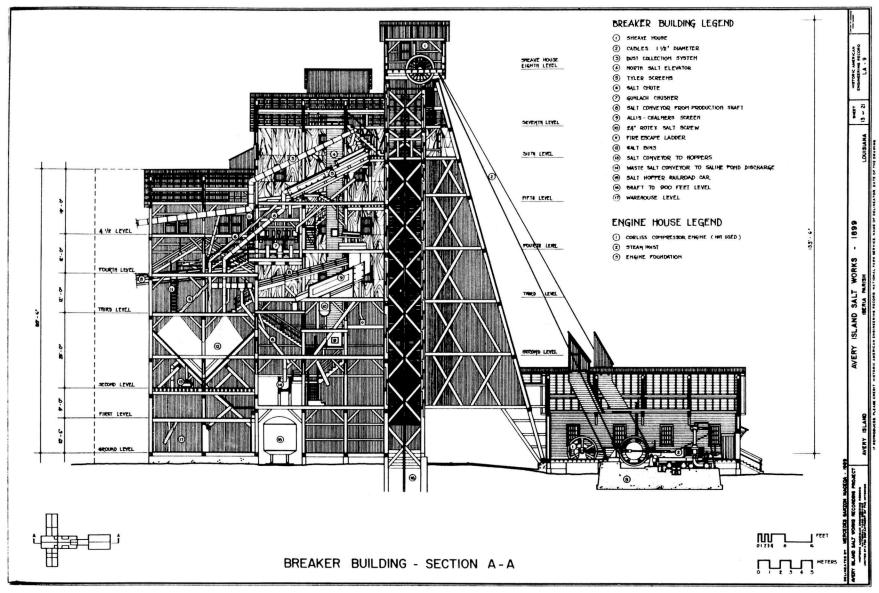
Louisiana, Lafayette

Richard S. Terry, Historian, Ironbridge Institute, Ironbridge, United

Kingdom (ICOMOS)

Avery Island Salt Works was erected in 1899, 300 yards to the southwest of an older salt mine dating from 1862, the oldest on the American continent. The 1899 surface structures initially consisted of a breaker building and engine house, which provided a system hoisting salt from the mine and crushing and grading it into marketable products. The steam hoisting engine is still in daily use at the mine, and is believed to be the oldest of its type still in operation. Although the original breaker machinery has long since been removed, the timber-framed breaker building houses modern crushing machinery and represents a fine example of late nineteenth-century American industrial architecture.

This summer's project consisted of measured drawings of the breaker building, engines, and engine house, including plans, sections, and elevations, together with a historical report tracing the history of the site and salt making on Avery Island from the pre-European era. A comprehensive photographic survey has been made by HAER photographer Jet Lowe.



Avery Island Salt Works (1899). (Shown) Section A-A, Breaker Building. Delineator: Mercedes Garzon Maceda, 1989

HAER PROJECTS

Delaware, Lackawanna & Western Railroad: Scranton Yards

Scranton, Pennsylvania

Project Leader:

Eric N. DeLony

Cosponsor:

Steamtown National Historic Site

Team Members:

Stephanie Gelb, Supervisory Architect, New York

Tomas Delahunty, Architecture Technician, University College, Dublin

(ICOMOS)

Amy Slaton, Historian, University of Pennsylvania

Michael South, Architecture Technician, Auburn University

Kathryn Steen, Historian, University of Delaware

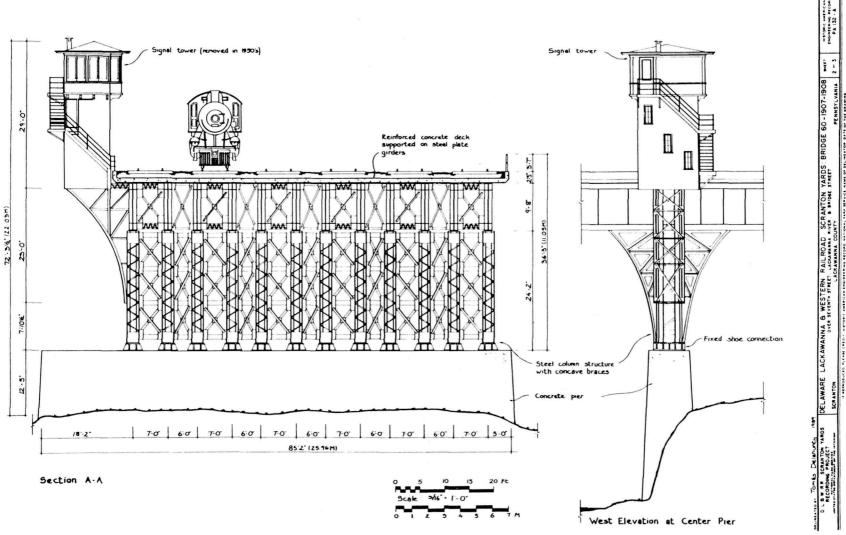
Martha Tucson, Architecture Technician, University of Illinois,

Champaign-Urbana

Mark Harrell, Photographer, Maryland Institute of Art

Scranton, birthplace of the Delaware, Lackawanna & Western (DL&W) Railroad, remained critical to the functioning of the railroad as it expanded, due to its midway location between the mainline terminal points in Buffalo, New York, and Hoboken, New Jersey. The Scranton Yards, located downtown, were the site of the locomotive maintenance facilities for the entire mainline. The DL&W ceased operation in 1963, and the yards have been largely unused since the 1970s.

In the first year of a potential two-year recording project, the Scranton Yards project focused on several of the many structures and processes necessary for the functioning of an active railroad yard. Most date from 1906 to 1926, the last decades of railroad expansion in the United States. Measured drawings were produced for three railroad bridges, a switchman's shanty, track scales with its associated structure, a coal trestle, an oil house, a gas house, scrap bins, and a signal tower. Because all of the non-bridge structures were derelict, and many had been converted from their original function, field measurements were supplemented with research. When possible, the structures were reconstructed through photographs and old drawings. The records produced by HAER in the summer of 1989 will facilitate the National Park Service's interpretive mission at the Steamtown Historic Site.



Delaware, Lackawanna & Western Railroad: Scranton Yards. (Shown) West elevation at center pier, Bridge 60 (1907-1908). Delineator: Tomas Delahunty, 1989

HAER PROJECTS

Historic Steel Works Allegheny County, Pennsylvania

Homestead, Pennsylvania

Project Leader:

G. Gray Fitzsimons

Cosponsors:

Steel Industry Heritage Task Force

HABS/HAER Office, Washington, D.C.

Team Members:

Joel Sabadasz, Field Supervisor, University of Pittsburgh

Mark Brown, Historian, University of Pittsburgh

James P. Dougherty, Historian, State University of New York at Buffalo Neil F. Dowlan, Historian, Institute of Industrial Archeology, Ironbridge

Gorge Museum, United Kingdom (ICOMOS)

Gerald M. Kuncio, Historian, University of Delaware Beth C. Shervey, Historian, University of Delaware Michael Workman, Historian, West Virginia University

Craig N. Strong, Supervisory Architect, University of Southwestern Louisiana

Christopher H. Martson, Architecture Technician, Carnegie-Mellon

University

Camilla L. Schlyter, Architect, Chalmers University of Technology,

Sweden (ICOMOS)

Patrick St. X. Williams, Architect, L. N. Girvan & Associates, Jamaica,

West Indies (ICOMOS)

Martin Stupich, Photographer, Boston, Massachusetts

Until the recent flurry of plant closings, Allegheny County in southwestern Pennsylvania had been one of the largest centers of iron and steel production in the United States for more than a century. This year, the team documented the six major steel mills of the former United States Steel Corporation, including four recently closed mills: the Duquesne Works, the Homestead Works, the Clairton Steel Works, and the National Tube Works in McKeesport. Two operating mills, the J. Edgar Thomson Works in Braddock and the Irvin Works in Dravosburg, were also documented.

The documentation focused on the major processes within each mill (i.e., blast furnace plant, basic oxygen plant, forging division, rolling and pipe mills, etc.). Within each process, particular attention is paid to material handling systems, power and energy transmission and transfer systems, cooling water systems, and environmental purification systems. For each mill, the team constructed a data base of present-day mill equipment and technological processes. They also wrote a short history on the processes over the past 100 years, and produced an overview history of each mill which embraces its rich role in corporate development, technology and work, labor relations, and mill/community relations. In addition, measured drawings of the 12,000-ton press shop at the Homestead Works, as it looked in 1903, were produced. A project review and exhibit was held on Monday, September 25 in the Carnegie Music Hall in Homestead.



Senator John Heinz (R-Pa) talks to Project Supervisor Joel Sabadasz at a June 27 press conference at Carrie Furnace in Rankin, Pa. L-r. Joel Sabadasz, film maker Tony Buba (with sound boom), Senator Heinz, and Jo H. DeBolt, Chair, Allegheny County Steel Industry Heritage Task Force. Photographer: Tom Fitzpatrick

Skagit Hydroelectric Project North Cascades National Park

Seattle, Washington

Project Leaders: Eric N. DeLony

G. Gray Fitzsimons

Cosponsors: Pacific Northwest Regional Office, NPS

Seattle City Light

Team Members:

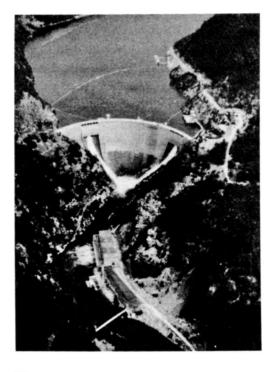
Nancy F. Mannikko, Historian, Virginia Polytechnic Institute and State

University

Patricia C. Erigero, Historian, University of Oregon

The Skagit Hydroelectric Project, owned and operated by the city of Seattle, is located in the Cascade Mountains of northern Washington. The project consists of three large hydroelectric plants--Gorge, Diablo, and Ross--and one small plant, Newhalem, as well as two company towns,

Newhalem and Diablo. The city first began developing the Skagit in 1918, utilizing what the superintendent of lighting, J. D. Ross, described as a "three-stage plan." The city completed construction of the first powerhouse, Newhalem, in 1921 and the last one, Ross, in 1955. The Skagit project, as a whole, illustrates the evolution of hydroelectric technology over almost a fifty-year span. In addition, City Light developed its own unique style in public relations. The company towns of Newhalem and Diablo were landscaped and, along with tours of the facilities, were marketed as a prime tourist attraction in the 1930s. The tours ceased during World War II, but were revived in the 1950s and continue to attract visitors from around the world.



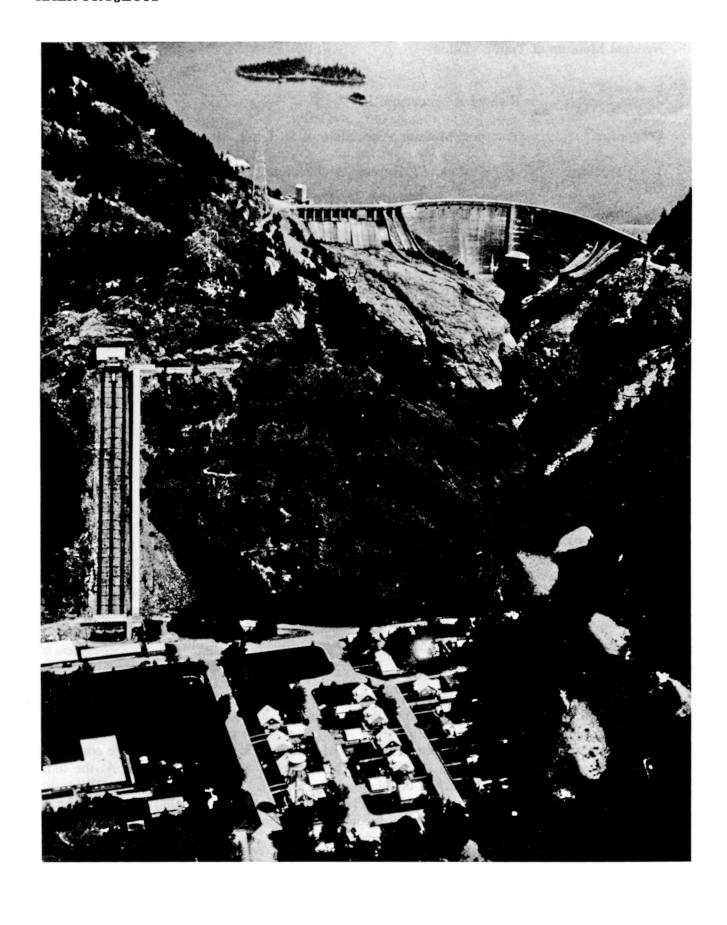
This was the first year of a two-year project. Work completed this year included an inventory of historic photographs and drawings at the Seattle City Light offices, an inventory of the hydroelectric plants and dams, and researching the history of the Skagit Hydroelectric Project. Large-format black and white photographs, taken by HAER photographer Jet Lowe, will complement the historic photographs and the written report.

Aerial View of Ross Dam and Powerhouse. Photograph courtesy of Seattle City Light.

Opposite page: Aerial view of Diablo Dam incline and the

community of Diablo.

Photograph courtesy of Seattle City Light.



Steam Locomotives
National Museum of Transportation

St. Louis, Missouri

Project Leader:

Richard K. Anderson, Jr.

Cosponsor:

Transport Museum Association of St. Louis, Missouri

Team Member:

Mark C. Rowan, Architecture Technician, Catholic University of

America.

The Boston & Albany (B&A) Railroad's locomotive No. 39 was the subject of HAER's pilot steam locomotive project. Preserved at the National Museum of Transport in St. Louis, this locomotive is the only survivor of a group of 136 "4-4-0" locomotives designed by the B&A's master mechanic Wilson Eddy. The engines were famous in their day for smooth running and became known as the "Eddy Clocks." No engineering drawings are known to survive for any of them, so HAER produced general arrangement drawings from measurements of the locomotive under the guidance of HAER staff architect Richard Anderson. Some three dozen preserved historic steam locomotives in the United States lack adequate drawing documentation. It is HAER's aim to record each of them in coming years, in consultation with John H. White, Jr., senior historian of the Division of Transportation in the Smithsonian Institution's National Museum of American History.

White River Hydroelectric Project

White River, Washington

Project Leader:

G. Gray Fitzsimons

Cosponsor:

Puget Sound Power and Light Company

Team Members:

Alejandro L. Lauria, Architect, Estudio LAAD, B.A., Argentina (ICOMOS)

Dennis E. McGrath, Architecture Technician, University of Kansas Douglas D. Pancoast, Architecture Technician, University of Kansas

Located between Buckley and Dieringer, Washington, the White River Hydroelectric Project was constructed in 1910-11 by the Pacific Coast Power Company, a subsidiary of the large Boston-based engineering and utility management firm, Stone & Webster. The concrete-constructed powerhouse at Dieringer was the focus of this summer's measured-drawing effort. The powerhouse contains two turbine-generator units dating from 1910, each turbine rated at 23,000 horsepower. At the time of their installation, they were the largest double-discharge Francis turbines in existence. The turbines were manufactured by Allis Chalmers of Milwaukee and operate under a head of 440 feet--the drop from the lake to the powerhouse. HAER documented the power plant and turbine, as well as the hydraulic system that conveys water to the turbines.

Yellowstone Roads and Bridges

Mammoth Hot Springs, Wyoming

Yellowstone National Park

Project Leader:

Eric N. DeLony

Cosponsor:

Yellowstone National Park

Rocky Mountain Regional Office

Parks Roads & Bridges Program, NPS

Team Members:

Julie E. Pearson, Supervisory Architect, Texas Tech University, Lubbock

Mary S. Culpin, Historian, Rocky Mountain Regional Office, NPS

Gerald J. Hansen, Architecture Technician, North Dakota State University

Elizabeth A. Harvey, Illustrator, Iowa State University

Laura E. Salarano, Architect, Universidad Nacional de Rosario, Argentina

(ICOMOS)

Steven M. Varner, Engineer, Virginia Polytechnic Institute and State

University

Yellowstone was the second of a multi-year program to document to HAER standards all National Register-eligible bridges in the National Park System. Last summer, HAER documented thirty-three structures in the National Capital Region. In Yellowstone, the team recorded twenty-seven bridges, six of which were measured and drawn; all bridges were photographed and written up. In addition, the team produced an illustrated leaflet explaining the significance and history of the road system, of which 30,000 copies were printed and distributed by the park.

HAER documentation coincided neatly with a project underway by the Rocky Mountain Region to nominate the entire road system to the National Register. As a result, Marcie Culpin, regional historian, was able to integrate her research into the HAER written reports. In 1990, HAER plans to document the Going-to-the-Sun Road, a fifty-mile road over the Continental Divide at 6 percent grade in Glacier National Park.

HABS/HAER PROJECTS

HABS/HAER DATA BASE EXPANSION (Phase II) and TRANSMITTAL OF RECORDS TO THE LIBRARY OF CONGRESS

Washington, D.C.

Project Leader:

Ellen Boone Minnich, Head, HABS/HAER Records Section

Team Members:

Marta Maria Cubina, Architecture Technicians, The Catholic University

of America

Tammy M. Delene, Historian, George Mason University

Craig S. Hirsch, Historian, Indiana University

Kenneth W. Martin, Historian, Virginia Polytechnic Institute and State

University

Ranne Rhee, Architecture Technician, Rensselaer Polytechnic Institute

Kenneth D. Rose, University of California, Los Angeles

Caroline Russell, Social Science Technician, Ohio Wesleyan University

This project was undertaken to complete an earlier effort of expanding the amount of information in the HABS/HAER data base. Extraction of information from the HABS and HAER documentation includes names, dates and uses associated with the recorded structures. Added to the data base were names of architects, builders, engineers, etc., dates of completion of construction, major alterations, abandonment or demolition of structures, and historic and subsequent uses of the buildings and structures. This completes those fields of information for more than 22,000 records in the HABS and HAER collections located in the Prints and Photographs Division, Library of Congress, Washington, D. C. 20540. Questions about the contents of the two collections should be addressed to the Library of Congress in writing or by calling 202-707-6394.

Much of the HABS/HAER backlog was transmitted to the Library of Congress, including summer projects, donations, and mitigative documentation. Summer field-team support was provided in the Washington office by Kathryn Jackson, Skidmore College, and Omari Franklin, Springbrook High School.

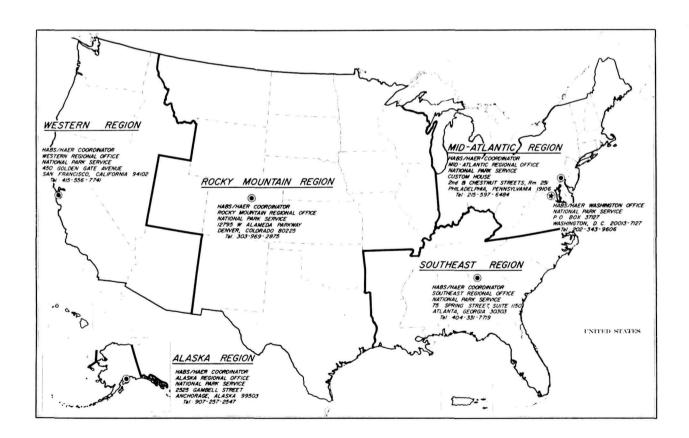
MITIGATIVE DOCUMENTATION PROGRAM

Under the provisions of the amended National Historic Preservation Act, Federal agencies are required to produce documentation to HABS/HAER standards on buildings, structures, sites, and objects that are listed in or eligible for listing in the National Register of Historic Places and that are threatened with demolition or substantial alteration by projects with Federal involvement. The five National Park Service regional offices charged with external historic preservation responsibilities administer the HABS/HAER mitigative documentation program. The actual work is usually conducted by contractors and supervised by the responsible Federal agency. The documentation produced is reviewed by the regional coordinator and transmitted to the HABS/HAER Washington office for inclusion in the HABS/HAER collections at the Library of Congress. The regional coordinators are:

- * Alaska Region
- Western Region
- * Rocky Mountain Region
- * Mid-Atlanta Region
- * Southeast Region

Kate Lidfors Ann Huston Gregory Kendrick Tina Van Dyke

Richard Ramsden



1

	CITY-TOWN	RECORD NAME /NDRW NPHO DATA
AK-36-H AK-36-E AK-36-F AK-36-C AK-36-D AK-36-L AK-36-J AK-36-J AK-34	FAIRBANKS PETERSBURG UNALASKA ISLAND	Ladd Field, Commanding Officer Quarters / 0000 0001 0000 Ladd Field, Community Building / 0001 0003 0001 Ladd Field, Hangar No. 1 / 0002 0015 0001 Ladd Field, Hospital / 0000 0003 0000 Ladd Field, Kodiak T-Hangar / 0004 0009 0001 Ladd Field, Nurses Quarters / 0001 0002 0001 Ladd Field, Power Plant / 0002 0008 0001 Ladd Field, Radio Station / 0000 0005 0001 Ladd Field, Twelve Apartments-NCO / 0000 0001 0000 Petersburg Office & Garage / 0000 0004 0013 Naval Operating Base Dutch Harbor & Fort / 0007 0005 0045
AK-34-A AK-34-B AK-34-C AK-34-C AK-34-E AK-34-F AK-34-G AK-34-I AK-34-J	UNALASKA ISLAND	Naval Operating Base Dutch Harbor & Fort/ 0004 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0003 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0004 0006 0001 Naval Operating Base Dutch Harbor & Fort/ 0003 0007 0001 Naval Operating Base Dutch Harbor & Fort/ 0003 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0004 0014 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0004 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0004 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0004 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0004 0005 0001
AK-34-K AK-34-M AK-34-N AK-34-O AK-34-P AK-34-R AK-34-R AK-34-T AK-34-T AK-34-U	UNALASKA ISLAND	Naval Operating Base Dutch Harbor & Fort/ 0004 0008 0001 Naval Operating Base Dutch Harbor & Fort/ 0002 0008 0001 Naval Operating Base Dutch Harbor & Fort/ 0002 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0003 0006 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0002 0008 0001 Naval Operating Base Dutch Harbor & Fort/ 0002 0002 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0004 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0004 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0000 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0000 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0000 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0003 0001
AK-34-V AK-34-W AK-34-Y AK-34-Z AK-34-AA AK-34-BB AK-34-CC AK-34-EE AK-34-EF AK-34-FF AK-34-II	UNALASKA ISLAND	Naval Operating Base Dutch Harbor & Fort/ 0001 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0002 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0004 0001 Naval Operating Base Dutch Harbor & Fort/ 0001 0014 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0006 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0006 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0005 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0002 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0003 0001 Naval Operating Base Dutch Harbor & Fort/ 0000 0005 0001

i.

HABSCODE CITY-TOWN RECORD NAME /NDRW NPHO DATA

ii

3

HABSCODE	CITY-TOWN	RECORD NAME	/NDRW NPHO DATA
MA-1216	CAMBRIDGE	Mount Auburn Cemetery, Main Gate Mount Auburn Cemetery, Sphinx /	0000 0013 0001
MA-1216-B	CAMBRIDGE	Mount Auburn Cemetery, Main Gate Mount Auburn Cemetery, Sphinx Bob's Yankee Diner Crane Paper Mill, Government Mill Crane Paper Mill, Pioneer Museum Easthampton Town Hall Essex Town Hall Aldrich Mill Hopkinton Supply Company Building Clam Box Restaurant First Parish Church First Parish Church, Stables St. Lukes Episcopal Church Lenox Academy	0000 0003 0001
MA-1242	CHARLTON	Bob's Yankee Diner	0000 0010 0000
MA-1240	DALION	Crane Paper Mill, Government Mill	0000 0001 0000
MA-1240-A MA-1232	FASTHAMPTON	Facthampton Town Hall	0000 0004 0000 0000 0007 0001
MA-1222	FSSFX	Essex Town Hall	0000 0009 0001
MA-1229	GRANBY	Aldrich Mill	0000 0008 0001
MA-1227	HOPKINTON	Hopkinton Supply Company Building /	0000 0006 0001
MA-1245	IPSWICH	Clam Box Restaurant /	0000 0003 0001
MA-542 MA-542-A	LANCASTER	First Parish Church Stables	0000 0017 0001
MA-1241	LANESBOROLIGH	St lukes Enjaconal Church	0000 0004 0000
MA-1239	LENOX	Lenox Academy /	0000 0004 0001
MA-1220	NORTH EASTON	Ames, Oliver, Free Library /	0000 0015 0001
MA-2-59	NORTH PEMBROKE	Society of Friends Meetinghouse /	0007 0014 0001
MA-1225-A MA-1225	NORTHBRIDGE	Whitinsville Brick Mill, Forge	0000 0001 0000
MA-1231	NORTHBRIDGE PALMER	Day & Night Diner	0000 0000 0001
MA-1218	SCITUATE	Clam Box Restaurant First Parish Church First Parish Church, Stables St. Lukes Episcopal Church Lenox Academy Ames, Oliver, Free Library Society of Friends Meetinghouse Whitinsville Brick Mill, Forge Whittinsville Brick Mill Day & Night Diner Lawson Water Tower	0000 0010 0001 0000 0013 0001
MA-1221	TAUNTON	Milk Bottle Dairy Bar & Restaurant /	0000 0002 0000
MA-1219	TAUNTON	launton State Hospital /	0000 0011 0001
MA-1238-B MA-1238-E	TYRINGHAM TYRINGHAM	Tyringham Shaker Settlement Barn & Garag/	0000 0001 0000
MA-1238-D	TYRINGHAM	Tyringham Shaker Settlement, Building No./ Tyringham Shaker Settlement, Building No./	0000 0002 0000
MA-1238-C	TYRINGHAM	Tyringham Shaker Settlement, Building No./ Tyringham Shaker Settlement, Main House &/	0000 0003 0000
MA-1238	TYRINGHAM	Tyringham Shaker Settlement, Main House &/	0000 0006 0000
MA-1238-A MA-1211	TYRINGHAM	Tyringham Shaker Settlement, Ox Barn /	0000 0010 0001
MA-1211 MA-1226	WEBSTER WELLESLEY	Hunnewell Cottage	0000 0007 0008
MA-1230	WELLESLEY	Tyringham Shaker Settlement, Ox Barn / North Village Schoolhouse / Hunnewell Cottage / Town Hall of Wellesley / Josiah Hayden House /	0000 0015 0001
MA-1234	WILLIAMSBURG	Josiah Hayden House /	0000 0011 0001
MA-1223	WOBURN	Beacon Oil Company Gas Station /	0000 0005 0001
MA-1236 MD-371	WORCESTER BALTIMORE	Higgins Armory / Randall, Blanchard, House /	0000 0016 0001 0000 0001 0000
MD-969	DALTIMODE	St. James Catholic Church & Rectory	0000 0019 0014
MD-970		510 Central (Commercial Bldg) /	0000 0008 0003
		Fort Snelling, Administration Building /	0009 0031 0000
MO-1839	BUNCETON VIC.	Ravenswood Farm /	0000 0019 0004
MO-1839-B MO-1039-A	BUNCETON VIC. BUNCETON VIC.	Ravenswood Farm Ravenswood Farm, Bull Barn // Ravenswood Farm, Kitchen Ravenswood Farm, Mule Barn // Ravenswood Farm, Tally Ho Barn // 205-209 Center St. (Commercial Bldg.)	0000 0002 0000
MO-1839-C	BUNCETON VIC.	Ravenswood Farm.Mule Barn /	0000 0001 0000
MO-1839-D	BUNCETON VIC.	Ravenswood Farm, Tally Ho Barn /	0000 0001 0000
MO-1870	HANNIBAL	205-209 Center St. (Commercial Bldg.) /	0000 0002 0000
MO-1869 MO-1868	HANNIBAL HANNIBAL	Clemens, J. M., Law Office /	0000 0003 0000 0000 0002 0000
110 1070	WANGAG GTTM	Conklin House	
MO-1261	KANSAS CITY KANSAS CITY	Huston, William F., House	0000 0005 0004
MT-53-U	ANACONDA	Anaconda Historic District /	0002 0014 0009
MT-73	CORVALLIS	Cowan House /	0000 0006 0007
MT-74 MT-75	GREAT FALLS	Clemens, J. M., Law Office House of the Pilasters Conklin House Huston, William F., House Anaconda Historic District Cowan House Rolland Apartments Sparling Hotel // Clemens, J. M., Law Office // Rolland Apartments // Rolland Hotel	0000 0009 0004
MT-72	HELENA	Federal Reserve Bank of Minneapolis.Hele/	0000 0010 0009
MT-77	WIBAUX	Conklin House Huston,William F., House Anaconda Historic District Cowan House Rolland Apartments Sparling Hotel Federal Reserve Bank of Minneapolis, Hele/ Cannon-Davis House	0000 0009 0008

iii.

HABSCODE CITY-TOWN RECORD NAME /NDRW NPHO DATA NE-42-B NE-42-G NE-42-E NE-42-D NE-42-A NE-42-H NE-42-I NE-42-F NE-42-C NH-213 NJ-974 NM-149 NM-149-B NM-149-C NM-149-A NV-20 NV-20-B NV-20-A NV-18 NV-18-A NY-6301 NY-5722 NY-6298 OH-2332 OH-2281 OH-2291 OH-2292 OH-2290 OH-2296 OH-2299 OH-2298 OH-2300 OH-2284 OH-2327 OH-2328 OH-2288 (MA OH-2329 OR-147 OR-147-A OR-147-B OR-147-C OR-147-D OR-147-F OR-147-G OR-147-E OR-142 OR-142-B OR-142-A PA-5361 PA-5361-B PA-5361-A PA-5368 PA-5358

iv.

5

v.

HAERCODE	CITY-TOWN	RECORD NAME /NDRW NPHO DATA	
		Buffalo Coal Mine Buffalo Coal Mine, Vulcan Cable Hoist Commercial Street Bridge Volume American Coal Mine Volume Cable Hoist Volume Commercial Street Bridge Volume Cable Hoist Volume Coal Mine, Vulcan Cable Hoist Volume Coal Mine, Faquhar Drive Unit Volume Coal Mine, Faquhar Porter English Volume	
AK-22-A	SUTTON	Buffalo Coal Mine, Vulcan Cable Hoist / 0000 0006 0000	Š
AK-19	SUTTON	Eska Coal Mine / 0000 0000 0017	7
AK-19-A	SUTTON	Eska Coal Mine, Faquhar Drive Unit / 0000 0003 0000	5
AK-19-B	SULTON	Eska Coal Mine Jeffery Fan/Blower Unit / 0000 0005 0000	J
AK-19-C	SULTION	Fisha Coal Mine Roof Parts / 0000 0002 0000	י
CO-55	BOONE VIC.	Nepesta Bridge / 0000 0010 0002	ź
CO-52	DENVER	Fourteenth Street Viaduct / 0000 0016 0003	3
CO-42	DENVER	National Radium Institute / 0000 0008 0013	3
CO-30-G	GRAND JUNCTION	Black Bridge / 0000 0008 0002	2
00-41	STEAMBOAT SPRIN	Four Mile Bridge / 0000 001/ 0002	5
CO-53	TRINIDAD TRINIDAD NEW HAVEN THOMASTON WASHINGTON	Commercial Street Bridge / 0000 0011 0002	5
CO-54	TRINIDAD	Linden Avenue Bridge / 0000 0014 0002	2
CT-42	NEW HAVEN	Chapel Street Swing Bridge / 0000 0035 0008	3
CT-35	THOMASTON	Frost Bridge Road Bridge / 0000 0013 0007	7
	WASHINGTON WASHINGTON	Boulder Bridge / 0000 0004 0007	7
DC-13	WASHINGTON	Grant Road Bridge / 0000 0004 0007	1
DC-18	WASHINGTON	Old Military Road Bridge / 0000 0004 0005	5
DC-15	WASHINGTON	National Radium Institute / 0000 0008 0013 Black Bridge / 0000 0017 0002 Fifth Street Bridge / 0000 0011 0002 Four Mile Bridge / 0000 0012 0002 Commercial Street Bridge / 0000 0014 0002 Linden Avenue Bridge / 0000 0014 0002 Chapel Street Swing Bridge / 0000 0013 0003 Frost Bridge Road Bridge / 0000 0014 0003 Boulder Bridge / 0000 0004 0003 Bridge over Boundary Channel / 0000 0004 0003 Grant Road Bridge / 0000 0004 0003 Old Military Road Bridge / 0000 0004 0003 Pinehurst Bridge / 0000 0005 0005 Rock Creek & Potomac Parkway Bridge near/ 0000 0006 0005	5
DC-14	WASHINGTON	Rapids Footbridge / 0000 0005 0005	5
DC-11 DC-12	WASHINGTON	Rock Creek & Potomac Parkway Bridge near/ 0000 0006 0005 Ross Drive Bridge / 0000 0005 0005)
DC-13 DC-10	WASHINGTON	Shoreham Hill Bridge / 0000 0003 0007) 7
DC-16	WASHINGTON	South Waterside Drive Overpass / 0000 0007 0009	3
DC-9	WASHINGTON	Tidal Reservoir / 0000 0000 0004	4
DC-9-A	WASHINGTON	Tidal Reservoir Inlet Bridge / 0000 0007 0009	3
DC-9-B	WASHINGTON	Tidal Reservoir Outlet / 0000 0004 0005	2
HT-3	HANALET	Rapids Footbridge Rock Creek & Potomac Parkway Bridge near/ 0000 0005 0005 Ross Drive Bridge Shoreham Hill Bridge South Waterside Drive Overpass Tidal Reservoir Tidal Reservoir Tidal Reservoir Outlet Central of Georgia RR, Bay St. Viaduct / 0000 0012 0002 Haraguchi Rice Mill Burlington Bridge East Dingle Bridge Cairo Bridge Cairo Bridge Cairo Bridge Hutsonville Bridge Hutsonville Bridge KY Route 1754 Bridge Champion Ice Manufacturing & Cold Storag/ 0000 0012 0002 Kentucky Rt. 840 Bridge Mammoth Cave Saltpeter Works / 0000 0003 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0013 0006 / 0000 0014 0006 / 0000 0015 0006 / 0000 0015 0006 / 0000 0015 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0012 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0012 0006 / 0000 0011 0006 / 0000 0012 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0012 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0012 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0011 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0011 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012 0006 / 0000 0012	ว
IA-20	BURLINGTON	Burlington Bridge / 0000 0046 0000	0
ID-13	MONTPELIER VIC.	East Dingle Bridge / 0000 0007 0008	8
IL-21	ALTON	Alton Bridge	Š
1L-36	CAIRO	Cairo Bridge / 0000 0003 0000 Delray Bridge / 0000 0012 0003	S
TN-59	HUTSONVILLE	Hutsonville Bridge / 0000 0075 0052	2
KS-6	LEAVENWORTH	Leavenworth Bridge / 0000 0047 0000	0
KY-22	CHAPLIN VIC.	KY Route 1754 Bridge / 0000 0015 0003	3
KY-26	COVINGTON	Champion Ice Manufacturing & Cold Storag/ 0000 0026 0015	5
KY-14 KY-18	MAMMOTH CAVE	Mammath Cava Saltantar Warks / 0012 0020 003	<u> </u>
KY-24	PINEVILLE	KY Route 2014 Bridge / 0000 0012 0000	2
KV-22	WILL TAMOBILE VI	KV P+ 1/78 Pridge / 0000 0012 0003	2
KY-21	WOLF CREEK	Champion Ice Manufacturing & Cold Storag/ 0000 0013 0003	3
MA-61	WOLF CREEK GLOUCESTER MONTAGUE TYRINGHAM WORCESTER	Annisquam Bridge / 0000 0016 0014	
MA-79	MUNIAGUE TVRINGHAM	Cabot Station Elec. Generating Plant, Gan/ 0000 0024 0007	1
MA-86 MA-60-B	WORCESTER	Tyringham Shaker Settlement, Dam / 0000 0005 0003 Venturi Meter / 0000 0001 0003	ī
MD-71	BIG SPRING VIC.	C & O Canal: McCoy's Ferry Road Culvert / 0000 0002 0007	7
MD-72	WORCESTER BIG SPRING VIC. BIG SPRING VIC. MARTINSBURG VIC	C & O Canal: McCoy's Ferry Road Culvert / 0000 0002 0007 C & O Canal: Prather's Neck Road Culvert / 0000 0003 0007	7
MD-69	MARTINSBURG VIC	C & O Canal: White's Ferry Iron Bridge / 0000 0004 0004	4
MD - 70	OLDTOWN	C & O Canal: Iron Bridge at Lock No. 68 / 0000 0005 0004	+

vi.

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HAERCODE	CITY-TOWN	RECORD NAME	/NDRW NPHO DATA
MI-29 MI-25 MI-27 MI-16 MI-219 MN-19-A MN-68 MO-333 MO-443 MO-333 MO-473 MO-443 MO-442 MO-345 MO-444 MO-326 MO-336 MO-448 MO-326 MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-330-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A MO-340-A	BANCROFT VIC. DETROIT GRAND RAPIDS PORT HURON ST. LOUIS VIC. ELYSIAN MINNEAPOLIS WINONA ASH GROVE VIC. BACON VIC. BACON VIC. BACON VIC. BCTTON ETLAH JAMESON VIC. JEFFERSON CITY LOUIS VIC. JEFFERSON CITY LOUIS VIC. VICKSBURG FORT BENTON VIC. ST. LOUIS VIC. VICKSBURG FORT BENTON VIC. ST. LOUIS VIC. VICKSBURG FORT BENTON VIC. ST. LOUIS VIC. VICKSBURG FORT BENTON VIC. STOCKETT VIC. STOCKETT VIC. STOCKETT VIC. TRIPLE ARCH VIC. TRIP	Knaggs Bridge Detroit Edison Hart Substation Bridge Street Bridge Blue Water Bridge Plaza Cheesman Road Bridge Elysian Water Tower & Engine House Elysian Water Tower, Pumphouse Lake Street-Marshall Avenue Bridge Winona Bridge Clear Creek Bridge Bacon Bridge Roberts Bluff Bridge Old Grade Road Bridge Dick's Mill Bridge Big Berger Creek Bridge Lewis Mill Bridge Schneider's Ford Bridge Jefferson Street Bridge Lock Springs Bridge James River Bridge Waterways Experiment Station, Hydraulics Great Northern Railroad Bed Rocky Boy's Agency Flour Mill Giffen Mine Giffen Mine, Fan Housing Giffen Mine, Fan Housing Giffen Mine, Fan Housing Giffen Mine, Fan Housing Giffen Mine, Tipple Going to the Sun Road Blair Crossing Bridge Omaha Bridge Plattsmouth Bridge Rulo Bridge Jackson Street Bridge Edison, Thomas A., Labs, Bldg. No. 3 Edison, Thomas A., Labs, Bldg. No. 5 Allentown Road Bridge West End-North Avenue Bridge	/ 0000 0012 0007 / 0000 0012 0007 / 0000 0022 0014 / 0000 0025 0011 / 0000 0011 0002 / 0000 0012 0008 / 0000 0012 0008 / 0000 0012 0008 / 0000 0058 0000 / 0000 0012 0014 / 0000 0012 0014 / 0000 0012 0014 / 0000 0012 0003 / 0000 0012 0003 / 0000 0013 0010 / 0000 0013 0000 / 0000 0013 0000 / 0000 0014 0000 / 0000 0001 0000 / 0000 0001 0000 / 0000 0005 0000 / 0000 0017 0000 / 0000 0017 0000 / 0000 0017 0000 / 0000 0017 0000 / 0000 0018 0000 / 0000 0018 0008 / 0000 0018 0008 / 0000 0018 0008
PA-104 PA-114 SC-20 SD-1	ST. PETERS VIC. VALLEY FORGE BAMBERG SIOUX CITY	Mount Pleasant Grist Mill Valley Forge Observation Tower Bamberg Cotton Mill Sioux City Bridge	/ 0000 0050 0018 / 0025 0000 0000 / 0000 0010 0006 / 0000 0030 0002 / 0000 0004 0000 / 0000 0020 0012
TN-14 UT-47 UT-47-J UT-47-K UT-47-E UT-47-A UT-47-H UT-47-G	COLDWATER VIC. MEMPHIS HEBER CITY VIC.	Memphis Bridge Park Utah Mining Company:Keetley Mine Co Park Utah:Keetley Mine:Employee Garage Park Utah:Keetley Mine:Employee Storage Park Utah:Keetley Mine:Lime Storage Shed Park Utah:Keetley Mine:Machine/Welding S Park Utah:Keetley Mine:New Office & Stor Park Utah:Keetley Mine:Office Building	/ 0000 0061 0000 / 0001 0009 0016 / 0000 0003 0000 / 0000 0002 0000 / 0000 0001 0000 / 0000 0005 0000 / 0000 0001 0000

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HAERCODE	CITY-TOWN	RECORD NAME /NDRW NPHO DATA
UT-47-F	HEBER CITY VIC.	Park Utah: Keetley Mine: Powder Shed / 0000 0001 0000
UT-47-I	HEBER CITY VIC.	Park Utah: Keetley Mine: Residential Area / 0000 0004 0000
UT-47-C	HEBER CITY VIC.	Park Utah: Keetley Mine: Sawmill/Carpenter/ 0000 0002 0000
UT-47-L UT-47-B	HEBER CITY VIC. HEBER CITY VIC.	Park Utah: Keetley Mine: Superintendent's / 0000 0003 0000 Park Utah: Keetley Mine: Tailing Car Snows/ 0000 0003 0000
UT-47-D	HEBER CITY VIC.	Park Utah: Keetley Mine: Tipple/Ore Car Sn/ 0000 0010 0000
UT-45	HELPER	Day-Mutual Mine / 0000 0004 0010
UT-53	HELPER VIC.	D-1 Wi / 0000 0000 0000
UT-53-A	HELPER VIC.	Rolapp Mine, Lamphouse / 0000 0006 0007
UT-53-B	HEBER CITY VIC. HELPER HELPER VIC. HELPER VIC. HELPER VIC. SCOFIELD SCOFIELD	Rolapp Mine / 0000 0000 0006 Rolapp Mine, Lamphouse / 0000 0006 0007 Rolapp Mine, Tramway / 0000 0002 0004 Jones Mine / 0000 0017 0008
UT-43 UT-44	SCOFIELD	7 0000 0017 0000
UT-52	STANDADDVILLE V	Winter Quarters Mine / 0000 0021 0009 Liberty Fuel Company, Mine Office / 0000 0009 0014
UT-54	STANDARDVILLE V	Rains Mine, Bathhouse / 0000 0013 0010
UT-55	STANDARDVILLE V	Standard Mine, Timber Trestle / 0000 0004 0012
VA-42-B	ALEXANDRIA VIC.	Mount Vernon Memorial Hwy: Alexandria Ave/ 0000 0004 0004
UT-54 UT-55 VA-42-B VA-42-A VA-50	ALEXANDRIA VIC.	Mount Vernon Memorial Hwy: Hunting Creek / 0000 0003 0005
VA-50 VA-49	DUMFRIES VIC. DUMFRIES VIC.	North Branch Quantico Creek Bridge / 0000 0006 0004
1/4 40	MOUNT VERNON	South Branch Quantico Creek Bridge / 0000 0005 0005 Mount Vernon Memorial Highway / 0000 0000 0008
VA-42 VA-42-C VA-42-D	MOUNT VERNON VI	Mount Vernon Memorial Hwy:Fort Hunt Over/ 0000 0002 0004 Mount Vernon Mem. Hwy:Little Hunting Cre/ 0000 0004 0005
	Mount Vernon Vi	Mount Vernon Mem. Hwy:Little Hunting Cre/ 0000 0004 0005
VA-48-D	WILLIAMSBURG	Colonial Nat. Monument Pkwy.Williamsburg/ UUUU UUU2 UUII
VA-48-C	WILLIAMSBURG	Colonial National Monument Pkwy, C & O RR/ 0000 0006 0009 Colonial Natl Mon. Pkwy, Capitol Landing / 0000 0005 0010
VA-48-B VA-48	WILLIAMSBURG YORKTOWN	Colonial National Monument Parkway / 0000 0005 0010
VA-48-A	Yorktown	Colonial National Monument Parkway / 0000 0000 0015 Colonial Natl Mon. Pkwy, Navy Mine Overpa/ 0000 0003 0008
WI-59	CHESTER TOWNSHI	Chester Bridge / 0000 000/ 0004
WV-25	WHEELTNG	Rridgeport Rridge / 0003 0028 0001
WY-17-N WY-17-D WY-17-J	ARVADA VIC.	Arvada Bridge / 0000 0003 0002
WY-17-D WY-17-T	ROSLER VIC.	Powder River Bridge / 0000 0016 0002 Laramie River Bridge / 0000 0003 0002
WY-17-F	BOULDER VIC	New Fork River Bridge / 0000 0004 0002
WY-17-L	CASPER VIC.	Arvada Bridge
WY-17-DD	CODY VIC.	Hayden Arch Bridge / 0000 0008 0002
WY-17-Y	DANIEL VIC.	Green River Bridge / 0000 0003 0002
WY-17-W WY-17-G	DUBOIS VIC. ELK MOUNTAIN VI	Big Wind River Bridge / 0000 0002 0002 Medicine Bow Bridge / 0000 0003 0002
WY-17-I	ENCAMPMENT VIC.	Medicine Bow Bridge / 0000 0003 0002 Butler Bridge / 0000 0003 0002
WY-17-C	ETHETE VIC.	Wind River Bridge / 0000 0002 0002
WY-17-AA	FONTENELLE VIC.	Green River Bridge / 0000 0002 0002
WY-17-Z	FORT BADGER VIC	Black's Fork Bridge / 0000 0001 0002
WY-17-BB	GREEN RIVER VIC	Big Island Bridge / 0000 0004 0002
WY-17-B WY-17-P	KAYCEE VIC.	South Fork Powder River Bridge / 0000 0014 0002 Powder River Bridge / 0000 0004 0002
WY-17-V	LOVELL VIC.	Powder River Bridge / 0000 0004 0002 Shoshone River Bridge / 0000 0006 0002
WY-17-Q	GREEN RIVER VIC KAYCEE VIC. LEITER VIC. LOVELL VIC. MONARCH VIC. MORTON VIC. RIVERVIEW VIC. ROCK RIVER VIC.	Tongue River Bridge / 0000 0003 0002
WY-17-X	MORTON VIC.	Wind River Diverson Dam Bridge / 0000 0005 0002
WY-17-K	RIVERVIEW VIC.	Cheyenne River Bridge / 0000 0003 0002
WY-6		Rock River Union Pacific Snowshed Plant / 0001 0012 0015
WY-17-U WY-17-R	SHELL VIC. SHERIDAN VIC.	Shell Creek Bridge / 0000 0002 0002 Big Goose Creek Bridge / 0000 0003 0002
WY-17-S	SUSSEX VIC.	Irigary Bridge / 0000 0003 0002
WY-17-T	THERMOPLOIS VIC	

viii.

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HAERCODE	CITY-TOWN	RECORD NAME	/NDRW NPHO DATA
WY-17-E		Four Mile Bridge	/ 0000 0011 0002
WY-17-CC		Laramie River Bridge	/ 0000 0004 0002

U.S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE P.O. BOX 37127 WASHINGTON, D.C. 20013-7127

OFFICIAL BUSINESS